JADE IN ANCIENT COSTA RICA



THE METROPOLITAN MUSEUM OF ART

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FOREWORD

"Jade in Ancient Costa Rica" is an exhibition that illustrates a particular moment in Precolumbian America when a group of works of art takes on a special and traditional singularity. The jades presented here, made over the course of about a thousand years in an area that today is chiefly northern and central Costa Rica, are precious, intimate objects, lustrous in surface, intricate in image, and totally personal in intent. Works of closely related shape and, without doubt, closely related significance, they bear witness to the enduring power of traditional custom among one of those ancient societies that are so far removed from our own. Relative degrees of uniformity and individuality characterize these small, ambitious sculptures, and the relativities both reassure us of our own ability to see distinctions and puzzle us at our own inability to understand them.

In order to gain insight into this illusive meaning, essays are presented here that deal with the aspects of ancient Costa Rican jade that can be examined today—the all-important archaeological context, the formal relationships with other jade-using areas of Precolumbian America, a review of the images themselves, and a look at their possible meaning. These issues are dealt with by Juan Vicente Guerrero, archaeologist on the staff of the Museo Nacional de Costa Rica, who discusses recent excavations and consolidates these painstaking operations into a broad time frame for jade and a customary pattern for its use. Mark Miller Graham, an art historian specializing in Precolumbian Central America research, deals with the thorny problem of Costa Rica jades and those of Olmec Mexico and the Maya area to the north. Michael Snarskis, archaeologist and authority on ancient Costa Rica, deals with the imagery of these individual works of art, and Zulay Soto Méndez, director of San José's renowned Museo del Jade, looks at the formation of that significant collection of jade. Julie Jones, who organized both the exhibition and the catalogue, briefly reviews the history of the modern awareness of the precious and alluring sculptures.

The Metropolitan has drawn heavily upon Costa Rican resources for help with the exhibition, and we are grateful for this help. Without the Museo Nacional de Costa Rica the exhibition could not have taken place, and the involvement of its director, Melania Ortiz Volio, has been indispensible to the project as a whole. The Museo del Jade Marco Fidel Tristán Castro was equally crucial to the success of the undertaking, and thanks is due not only to the Museo del Jade but to the Instituto Nacional de Seguros, the organization supporting that museum and its activities.

Other Costa Ricans who must be thanked for their generosity and spirit of cooperation are Doña Marjorie de Oduber, who graciously contributed loans from the Colección Daniel Oduber, and Alfonso Jiménez Alvarado, who lent works from his own collection. The Instituto Costarricense de Turismo also contributed to the success of "Jade in Ancient Costa Rica," for which we are grateful. Colleagues in the United States, of course, have responded generously to our requests for loans, and I am pleased to be able to thank them for their participation in this exhibition. And to the organizer of the exhibition and the general editor of the catalogue, Julie Jones, I extend the Metropolitan's particular appreciation.

Philippe de Montebello
Director
The Metropolitan Museum of Art

PREFACE

Even though we are now at the very beginning of the twenty-first century, we are still both amazed and bewildered by the sensibility and world view of the Precolumbian peoples of the Americas. Their special vision is manifest in so many ways—through the use of the many different materials that embellished their lives, and through the great craftsmanship with which they worked this wide variety of media. Their identity and a sense of their history begin to be revealed by these objects. This is particularly true in Costa Rica, where there are no remains of majestic architecture but where magnificent works of art mark ancient presences. Objects of many types and varieties, of differing styles, and in a diversity of materials were produced, among them objects of jade.

Jade is an intriguing material for many reasons. In spite of searches for it, no source of the raw material has been identified in Costa Rica. Yet jade and other greenstones were widely used in Precolumbian times. The craftsmanship available for the working of jade was advanced enough by 500 B.C. to indicate that complex societies existed in Costa Rica. These societies could support artisans who had the time to devote to a particular task, such as the working of jade. This work was then testimony to the high status of those for whom it was done.

Organized by The Metropolitan Museum of Art, "Jade in Ancient Costa Rica" is the first exhibit to focus solely on the topic of Costa Rican jade. For the first time, too, jade objects excavated by the Museo Nacional de Costa Rica have been included in the exhibit, thus providing an archaeological context for them and expanding the information available for all jades. Thus this new information is linked to the beauty of the material and the artistic quality of the workmanship in jade. The character of the exhibition, its installation, and the magic of Costa Rican jade itself, are gifts for the senses that will allow our imaginations to travel twenty-five hundred years back in time. The creation of these works of art embraces the desires and beliefs of ancient peoples. We are fortunate in being able to rescue them and to study and enjoy them.

Melania Ortiz Volio
Director
Museo Nacional de Costa Rica

ACKNOWLEDGMENTS

The help of many people is always necessary in preparing an exhibition, and I would like to thank those who assisted in making "Jade in Ancient Costa Rica" possible. First thanks go to the lenders in Costa Rica who have supplied the lion's share of loans, and to those in the United States, where works demonstrating specific aspects were added to the exhibition.

Marlin Calvo Mora of the staff of the Museo Nacional deserves special credit as the "keeper of details" and the one who could always answer my many questions. She was ably assisted by Leidy Bonilla Vargas in a variety of required tasks. Colleagues at lending institutions in the United States to whom I am grateful are David Watters of the Carnegie Museum of Natural History, Pittsburgh, Nancy Beers of the National Geographic Society, Washington, D.C., and Diana Fane and Lauren Ebin of the Brooklyn Museum of Art.

At The Metropolitan Museum of Art, thanks for various efforts on behalf of the exhibition go to Susan Bergh, Heidi King, and Jeanette Schnell of the Department of the Arts of Africa, Oceania, and the Americas, and to Ross Day and the staff of the Robert Goldwater Library. Joseph Coscia Jr., of the Museum's Photograph Studio, must be especially acknowledged for his splendid photographs of such small precious objects with very shiny surfaces. Deborah Schorsch and George Wheeler of the Sherman Fairchild Center for Objects Conservation are also thanked for undertaking the examination of the jades in the exhibit by means of X-ray diffraction analysis.

I am particularly grateful to Alfonso Jiménez Alvarado of San José for the very many courtesies extended both to the exhibition and to me personally. And to William S. Wilson—for the helpful discussions of the meaning of bodily adornment—goes a special note of thanks.

Julie Jones
Curator in Charge
Department of the
Arts of Africa,
Oceania, and the
Americas



INTRODUCTION

JULIE JONES

> Early peoples, already experienced in working common stone to create their tools and weapons, soon discovered the outstanding qualities of jade: its hardness and the compactness of its mineral structure, its beauty and its luster. In addition to employing jade in the manufacture of tools, weapons and ornaments, they further imbued it with great significance, and a whole new vocabulary of shapes, decors and symbols was born.

The ancient inhabitants of Costa Rica were among those early peoples who learned, with great patience and subsequently acquired skill, to work the hard and lustrous stones into objects both useful and meaningful. During a thousand-year period, roughly between 300 B.C. and A.D. 700, the inhabitants of the Central American region now known as Costa Rica produced the many ornaments of hard greenstone that began to be unearthed in the nineteenth century, having been lost from sight for about a millennium. By the 1850s, the modern populations of Costa Rica were increasing. They cleared and planted the land, and in doing so they discovered the ancient dwellings, plazas, cemeteries, and tombs that held the evidence of earlier peoples.

Speculation about the antiquity of the earlier populations grew during that century, and the works being unearthed began to attract attention. Scientific researchers, landowners, politicians, and foreigners were attracted to the objects of jade, stone, and ceramic being revealed, and among the foreigners were diplomats, who collected these antiquities while on assignment in San José. One such collector was the German consul in the early 1870s, Johann Friedrich Lahmann, who amassed many hundreds of Costa Rican antiquities over a period of years. Although Lahmann himself was to remain in Costa Rica, he sold a significant group of his antiquities to the city of Bremen for the Sammlungen für Naturgeschichte und Ethnographie (today the Übersee Museum) in 1879.

In Germany, the Lahmann collection attracted the attention of the noted Freiburg mineralogist, Heinrich Fischer, an early authority on nephrite and jadeite. In 1875 Fischer published a compendium of information on his subject, *Nephrit und Jadeit*, in which drawings of Costa Rican jades from the Lahmann collection appeared.[2] A few years later, Fischer published separately the sixty-three Lahmann jade objects with more drawings of them.[3] Of particular interest was a group of nineteen jades that were said to have been in a single grave near Las Palmares in Alajuela Province.

Among the Palmares pendants were those of particularly good size and, today, recognizable image (fig. 1), and smaller pendants and beads. Fischer tested the sixty-three hardstone objects for their specific gravity—a test that measures the density of the minerals—and in spite of his expertise he could not always determine to his satisfaction the type of stone used in the fabrication of the Costa Rican pendants, although there were a number he considered to be made of jadeite. Further, as there was then no known source of nephrite or jadeite in the Americas, Fischer was "inclined to think" that the material was Asian, either having been brought from Asia by

Plate 1. Two blade-form pendants of jadeite from Las Huacas site, Nicoya Peninsula, Guanacaste Province. *Checklist nos. 5, 6*



Fig. 1. Drawings of two figure-celt pendants from a burial at Las Palmares, Alajuela Province, in the collections of the Übersee Museum, Bremen, since 1879. The transverse perforations that allowed for stringing are indicated. (From Fischer 1881, pl. 11, nos. 24, 25). Courtesy, the Naturwissenschaftliche Verein zu Bremen

migrations of peoples or having arrived in the Americas through trade.[4]

Other early investigators also pursued the jadeite source issue. In 1877 a United States Navy officer, J. F. Bransford, visited northwestern Costa Rica while engaged in a survey for an "inter-oceanic ship-canal." He collected antiquities there for the Smithsonian Institution, including sixteen "objects in green stone" (fig. 2) of which a number were thought to be made of jadeite.[5] Bransford was once again in Costa Rica five years later with a new assignment, "to find if possible the source of jadeite in Costa Rica."[6] He did not find it.

Heinrich Fischer's opinion that Asia was the source of American jade was contested not only by actual searches for geological sources but by scholars in other fields as well. Hermann Strebel of Hamburg examined historical documents and found the sixteenth-century New World chroniclers who had written of the high regard in which greenstone was held in Aztec Mexico and of how stones of different quality had been distinguished there. Strebel thought that these qualitative distinctions might well correspond to "certain types of nephrites or jadeites." He also said that the search for the source of raw material in the Americas had been too limited to preclude the possibility of its existence there.[7]

The qualitative distinctions made by the ancient Mexicans about the greenstones they valued in Precolumbian times is an indication of the range of quality and quantity available to them. A similar variety was apparently obtainable in ancient Costa Rica, and it was extensively used for greenstone ornaments of many sorts. During the present century, this wide variety of greenstone objects has commonly been grouped under the single term *jade* in both Costa Rica and Mexico, while mineralogical studies have ascertained that the highest quality "jade" in the Americas is jadeite. Nephrite is chiefly an Asian stone.

In Costa Rica by the 1880s, antiquities collected by landowners, townspeople, and early researchers into the country's natural resources were reaching impressive numbers. In 1886 an *Exposición Nacional* was held in San José that exhibited "zoological, botanical, and mineralogical collections and . . . precious collections of antiquities" were also presented.[8] The archaeological collections displayed were primarily those of José Ramón Rojas Troyo, from the central part of the country at Aguacaliente and Turrialba, Cartago Province, and those of Juan José Matarrita, whose holdings came from the Nicoya Peninsula and the nearby Chira Island.

Objects from the Troyo and Matarrita collections would form part of the Costa Rican selection that went to the influential *Exposición Histórico-Americana* in Madrid in 1892 and 1893. This exposition celebrated the important centennial of the arrival of Christopher Columbus among the islands of the Caribbean, and numerous Latin



Fig. 2. Greenstone objects collected in 1877 on the Nicoya Peninsula for the Smithsonian Institution, Washington, D.C. (From Bransford 1885, pl. 2).

American republics sent exhibits to Madrid that included meaningful representations of antiquities from their respective regions. The organization of the Madrid selections focused the attention of both politicians and learned communities on the pre-Spanish past of the respective Latin American countries, a focus that was to have a profound effect on the subsequent interest in and involvement with that past.

Costa Rica was no exception. In preparing for the Madrid display, additional digs were undertaken at the important site of Guayabo de Turrialba in Cartago in order to augment the selection of antiquities being sent. With its plazas and courts, stone-paved roads, and notable stone sculpture, Guayabo de Turrialba had a long occupation history, and its ancient remains were a significant source of objects. Located on Troyo property, it had yielded many of the objects in the Troyo collections.

The dig at Guayabo, in which major graves were uncovered, was conducted under the leadership of Anastasio Alfaro, who was to be the first director of the Museo Nacional de Costa Rica. Alfaro was also the joint author of the Costa Rican catalogue for the Madrid exhibit. Among the hundreds of objects listed in the Madrid catalogue were numerous *hachas o cuchillos de piedra* (stone axes or knives) and *cuchillos de jade* (jade knives).[9] *Hachas* (axes) or *cuchillos* (knives) were then the names given the celt- or axe-form works that were subsequently called *dios-hacha* (axe-gods) and now are more generally named *colgantes* (pendants).

The Madrid catalogue also addressed the issue of the

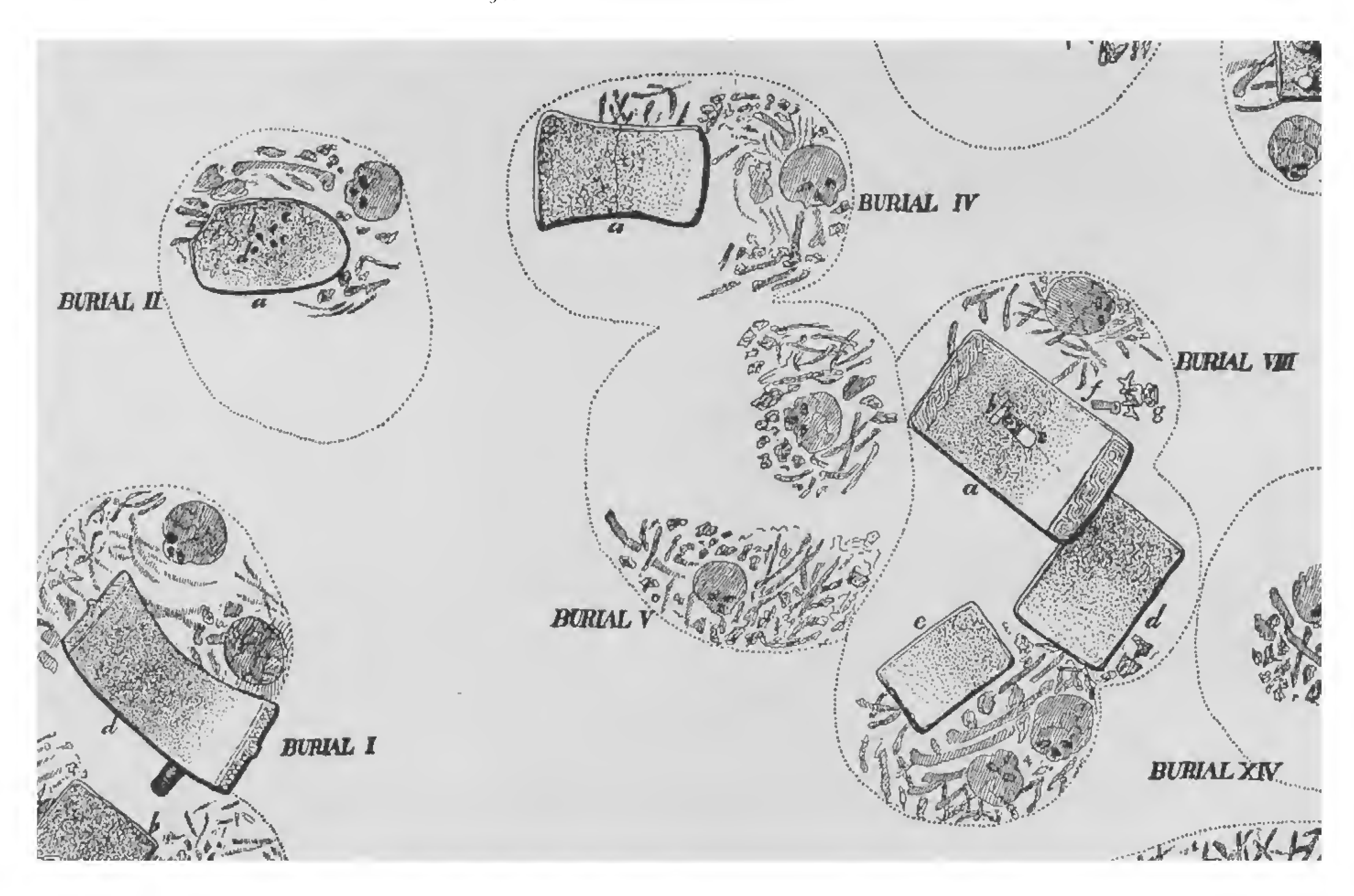


Fig. 3. Drawing of burials at Las Huacas site, Nicoya Peninsula, excavated in 1903. (From Hartman 1907, pl. 47). Courtesy, Carnegie Museum of Natural History, Pittsburgh

jadeite source in the description of two *cuchillos de jade* that came from the same tomb near the Nicoya Peninsula town of Santa Cruz and were identical in form, size, and polish. The two showed unequivocal signs of having been cut from the same elongated almond-shaped stone, and in the authors' view they probably had not been made long before the Spanish conquest. These features confirmed for them the fact that jade objects could not have come from Asia. Then, following Strebel, they found that the reason jadeite had not been geologically confirmed in Central America was because the research had, as yet, been imperfectly done.[10]

When the Museo Nacional de Costa Rica was established in San José in 1887, its "foundation" collection was that of José Ramón Rojas Troyo, who had died leaving his antiquities to the nation. The Troyo collection was very large, and while the bulk of it came from family properties in Cartago Province, there had been purchases of objects from other regions of Costa Rica. Among them were *piedras verdes*—stones of green color—from Guanacaste. The museum holdings of works from Guanacaste were soon enlarged when the Matarrita collection was purchased, thereby adding archaeological substance to the growing collections of the young museum.

By the 1890s Guanacaste was a well-known destination for travelers, professional and otherwise, with archaeological interests. Guanacaste Province, archaeologically part of Southern Greater Nicoya, is located in northwestern Costa Rica adjoining Nicaragua at the Pacific Ocean. (Northern Greater Nicoya is in Nicaragua.) The Nicoya Peninsula is a prominent part of Guanacaste Province, jutting southward into the Pacific with the Gulf



Plate 2. Metate from Burial VIIIa at Las Huacas site, Nicoya Peninsula, Guanacaste Province. *Checklist no. 10*



Plate 3. Underside of metate in plate 2

of Nicoya separating its lower end from the mainland. At that lower end the peninsula is part of another Costa Rican Province, Puntarenas. The Nicoya Peninsula and the adjacent Guanacaste mainland were home to many ancient Americans. Burials in both locations have been the source of countless antiquities, many of them *piedras verdes*.

The *piedras verdes* of the Nicoya Peninsula cemetery called Las Guacas, or more currently Las Huacas, brought attention to the area. Las Huacas is situated about halfway down the Peninsula near a mountain pass named La Quebrada de las Guacasin in the nineteenth century, because of the quantity of ancient remains found there. Las Huacas was an extensive burial ground that had been discovered and initially looted in the 1870s, when the land was first cleared of its forest cover. A local priest, José María Velasco, working with the owner of the land on which the cemetery stood, was particularly attentive to the possibilities the ancient graves offered for amassing and selling antiquities. Velasco put together several large groups of objects that were sold, increasing the notoriety that brought outsiders to Las Huacas.

One such outsider was Carl V. Hartman, a Swede working for the Carnegie Museum of Pittsburgh. In 1896 Hartman was interested in excavating at Las Huacas but initially could not get permission, which had to come from José María Velasco. Hartman was finally granted permission seven years later and carefully dug several Las Huacas graves that he soon published. Hartman's 1903 Las Huacas dig and its 1907 publication have proved to be important for the understanding of jade and its funerary context in ancient Costa Rica. The burial patterns revealed



Plate 4. Figure-celt pendant from Burial VIIIa at Las Huacas site, Nicoya Peninsula, Guanacaste Province. *Checklist no. 11*



Plate 5. Figure-celt pendant from Burial VIIIa at Las Huacas site, Nicoya Peninsula, Guanacaste Province. *Checklist no. 12*

at Las Huacas would prove to be consistent with Costa Rican funerary practices as they are understood today (fig. 3, and chap. 1, this volume).

At Las Huacas, Hartman excavated a number of tombs, some of which contained more than one interment and at least one of which was disturbed. Burial VIII[11] held the remains of three persons, together with three decorated metates and various smaller objects. The metate accompanying the deceased in Burial VIIIa had two figure pendants lying on its upper, tablelike surface. The metate, carved of a volcanic stone, had relief patterns on its three legs, on the underside, and along the rim of the top (pls. 2, 3).

The pendant images discovered on the decorated metate (pls. 4, 5) are human in feature and simply rendered with heads with wide mouths and large noses of triangular shape. The smaller of the two pendants has short double projections from the top of the head. The figure's hands meet, or arms cross, at waist level and below them extends the celt or axelike form that is so tellingly Costa Rican. The celtlike shape is considered to be based on that of a working stone tool. The pendants are pierced for suspension below the figures' heads, and when worn they would have been hung on a cord or thong around the wearer's neck. In image, form, and detail the two pendants are directly comparable to other Costa Rican works executed in various stones, although they themselves are not of visibly high-quality hardstone.

Metates in two other Las Huacas burials stood upright with greenstone objects placed on them (Burial II and XVI). These metates were plain with no elaborative



Plate 6. Pendant with three danglers from Las Mercedes site, Línea Vieja, Limón Province. *Checklist no. 109*



Plate 7. Bird-celt pendant from Mercocha site, Williamsburg vicinity, Línea Vieja, Limón Province. *Checklist no. 96*

carving, their jade ornaments smaller,[12] but they are part of the metate-and-greenstone ornament combination that has been recognized in many funerary contexts throughout Costa Rica since Hartman did his work at Las Huacas in the early years of this century. Since then, the metates and jades have been dated to a time much earlier than the late preconquest date supposed for them by the organizers of the Madrid centenary exhibit. Jades have been dated for some years now largely to the millennium between 300 B.C. and A.D. 700, although more recent excavations indicate the possibility of an even longer period of jade use (from 500 B.C. to A.D. 900; see chap. 1).

The variety of combinations, types, and placements in which the metates and jade ornaments, often accompanied by the so-called ceremonial mace heads, were deposited in burials is intriguing. Mace heads are hardstone objects approximately the size of a closed fist that were worked in a wide range of form, from plain to complex image. They may have been hafted or otherwise mounted through a large central hole (see chap. 3, figs. 43, 44). The presence of these three types of works—metates, pendants, and mace heads—in funerary contexts has come to be regarded as especially meaningful and indicative of high rank or status in ancient Costa Rica.

The specific funerary significance of these works, other than as a general indication that the person buried with them had enough resources to command such carefully made stone objects, is not clear, in part because their function in life is not clear. The metates are thought by some to have been ceremonial seats or thrones,[13] but by

others to have been ceremonial grinding tables.[14] Possibly they were both. The mace heads have been considered to be weapons, displayable symbols of rank, group insignia, and signaling devices.[15] Perhaps they were all of the above. What is clear about these objects is that they were all used as mortuary offerings.

Carl Hartman was to work in another major archaeological region of Costa Rica, that of the Atlantic Watershed across the continental divide from Guanacaste Province. It is an area of substantial annual rainfall and many rivers that flow toward the Caribbean Sea. While working there, Hartman addressed his attention particularly to the archaeological site of Las Mercedes in Limón Province. Like Guayabo de Turrialba, Las Mercedes was a major late-period center with imposing circular mounds, stone sculpture, and many graveyards. The stone sculpture of the site had been noted, especially when a railway bed was put through the site in the 1880s.

Las Mercedes was located on property owned by the railroad builder, a New Yorker by the name of Minor Cooper Keith. Keith became a collector of antiquities while in Costa Rica working on the railroad and amassed thousands of archaeological pieces from Las Mercedes and elsewhere. The railroad line, called Línea Vieja, ran between the towns of Siquirres and Guápiles in Limón Province and was part of the rail system that connected the Caribbean port town of Limón with interior areas of the country.

Hartman unearthed no jades in Atlantic Watershed tombs as he had done in Guanacaste, but numerous such objects were to come to light from the ancient cemeteries along Línea Vieja. The railroad was situated just at the flank of the Cordillera Central as it leveled off into the eastern lowlands, and the varied resources the environment offered made it a desirable place to live for early jade-using peoples. Today Línea Vieja, like Guanacaste, is still known as one of the primary sources of Precolumbian Costa Rican jade objects. In the extensive Keith collections, which made their way into New York–area museums, there are jades from Línea Vieja, among them those recorded as coming from Las Mercedes[16] (pl. 6 and see chap. 3, pl. 39, and checklist no. 106).

It was a jade pendant from Línea Vieja that produced the first indication that the jades of Costa Rica might be earlier than had been supposed. A site named Mercocha, on the outskirts of the railway town of Williamsburg, was visited in 1964 by North American archaeologist Matthew Stirling. Stirling, accompanied by his wife, Marion, conducted brief excavations at the site, discovering a number of jade objects in the process. A jade figure pendant (see chap. 1, pl. 14) was located in a pit at the base of a circular stone mound. The pit also contained enough charcoal remains to test for a date by the radiocarbon method. The test result was A.D. 144,[17] and while initially considered very early it is now in line with other radiocarbon dates for Costa Rican jade.

The Mercocha figure pendant is typical of Línea Vieja in both imagery and execution. Figure pendants from the Atlantic Watershed usually do not have the celtlike lower half that was noted earlier on the Las Huacas pendants. Instead, the figures stand on their own two legs (see chap. 3, pls. 54, 55). Another jade pendant excavated by Stirling at Mercocha, one with a bird beak (pl. 7), does have a celtlike lower section, an aspect more routinely identified with Guanacaste jades than with Línea Vieja jades. Just as the celtlike form has been associated with Guanacaste over the years, the cutout, intricately outlined shapes have been said to come from the Atlantic Watershed. These observations, however, are general ones only, as the vast majority of Costa Rican jades have no ascertainable provenance.

Another archaeological region of Costa Rica has begun to distinguish itself in recent years, and jade objects are associated with it. Although hearsay evidence is slight, a growing body of jade objects is said to be from what is designated as the Central Region, composed rather loosely of the highland Central Valley where San José is located, and the central part of the Pacific coast below Guanacaste and above the city of Quepos on the coast. Archaeologists are defining the region and beginning to outline its ancient lifeways and regional relationships,[18] while impressive jades have been excavated in the Central Valley (see chap. 1, pl. 11). Others are said to come from the Central Pacific region (see chap. 3, pls. 51–53) with no further site or area designation.[19]

Future research may be able to pin down a source or

sources—where the objects were made—and put them together with recognizable aspects of form and style, thereby localizing particular groups of objects. Current word-of-mouth information about provenance—where the jades were found—does place some jades distant from their supposed place of manufacture. For instance, a pendant of "guanacaste" shape such as plate 7 when found in Línea Vieja is taken to imply interchange of finished jade objects between "style areas" in ancient times. Yet there are other possibilities: that form and image traveled from jade-working center to jade-working center within Costa Rica; or that the artist and his "toolkit" traveled. Thus form and image in themselves should not be taken as indicators of the place of origin.

A jade discovery with great implications for "style areas" and the source of worked jade objects is one reported from Guanacaste in 1938. An *ídolo de jadeíta*, said to come from a cemetery on the western skirts of the Cordillera de Guanacaste, was in a burial "in a zone that is very rich in archaeological material made from semi-precious stones."[20] Costa Rican professor of archaeology Jorge A. Lines published the *ídolo* (fig. 4 and see chap. 2, pl. 23) in 1942, commenting that it was cut from translucent blue-green jadeite and relating its "baby-faced" features to other similar works of the "Olmec horizon" in Mexico.[21] Lines's observation was significant because the Olmec horizon had just been outlined for Mexico itself, and the Guanacaste "baby-faced" figure introduced a larger issue to Costa Rican archaeology—that of the nature and extent of its contact with southern Mexico in Precolumbian times, most particularly where jade objects were concerned.

This issue—the nature and significance of contact with Mexico—is unresolved,[22] as is the raw material question related to it. The strong visual similarity of the jade described by Lines as "translucent blue-green jadeite," found in Olmec and Costa Rican jade objects, led to the theory that an American source of the raw material might be in Costa Rica. Such a geological source of raw jadeite has been thought to be the Santa Elena Peninsula in the far north of Guanacaste, but searches for the mineral there have not been fruitful.[23] There is still belief, however, that jadeite sources exist in Costa Rica, but "not enough is yet known about the provenance of mesoamerican and Central American jades, their chemical and mineralogical compositions, mineral and geologic associations, and the environments of formation"[24] to speculate further.

Since the 1970s, the Museo Nacional de Costa Rica has been actively engaged in researching the country's ancient past. Through excavation and publication, archaeologists and others on the museum's staff have added enormously to the information available about Precolumbian Costa Rica.[25] Together with other Costa Rican specialists, time periods have been outlined, regional and external relationships proposed, and "jade"

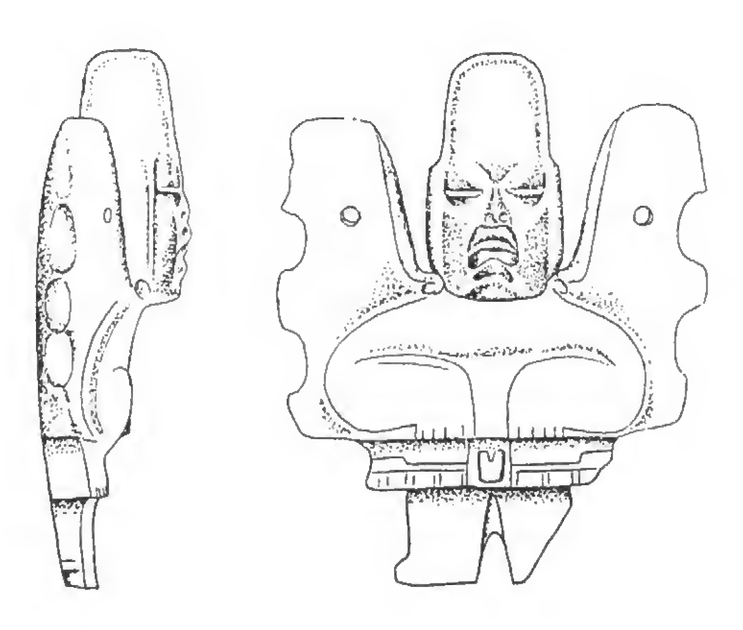


Fig. 4. Drawings of the front and side of an Olmec figure pendant found in Guanacaste in 1938. (From Lines 1942: fig. 1 [4])



Plate 8. Celt-form pendant from Las Huacas site, Nicoya Peninsula, Guanacaste Province. *Checklist no. 8*



Plate 9. Figure-celt pendant possibly from the Central Pacific Area. *Checklist no. 81*

has been given a time frame in which it was used and revered in ancient Costa Rica, and past which it did not continue to be available. Now early and late works (see chap. 1, figs. 11, 20) within the corpus can be distinguished, and the fundamental purpose of worked jade is known to have been for personal adornment, primarily in the form of pendants to be suspended about the wearer's neck.

The Costa Rican pendant form is overwhelmingly that of an elaborated celt (pl. 8). Its elaboration is in the depictions at the smaller (or what would have been the hafted) end of the celt, where stylized depictions of human beings, animals, birds, or combinations thereof, are worked (pl. 9). The celt form itself is considered to take its meaning from the world-of-work, where it was a tool necessary for survival among stone-age societies (pl. 10). Why the particular shape and its elaboration became a wearable object in Costa Rica is conjectural. The elaborated celt in suspendable form is rare elsewhere in the Americas, but in Costa Rica the formula is present in the earliest documented find of such an object (see chap. 1, fig. 11). This is the "jadeite pendant with the axe-god effigy" found as a funerary offering in a bundle burial at the site of La Regla in the tidewaters of the Gulf of Nicoya.

Perhaps initially strung with the wooden beads discovered in the same bundle, the La Regla pendant has—at about 500 B.C.—all the characteristics that define a Costa Rican jade pendant.[26]

During the subsequent centuries, the pendant form was much used, as indeed was the jade material itself. From the evidence of the works themselves, the jades were treasured, kept as heirlooms, traded, reused, redrilled, recut, and reoriented, made into smaller and/or different shapes, and buried with the honored dead. While complex images were skillfully worked into many shapes, the primacy of the pendant made to be suspended about the wearer was never lost. They were the "bodily ornaments and adornments . . . [that were] both emblems of the society of men and spiritual flesh in the community of souls."[27]



Plate 10. Working celt of jadeite showing polished and unpolished surfaces. The unpolished end was hafted. *Checklist no. 4*

1. Teng Shu-P'ing 1992: 44.
2. Fischer 1875: 344–45.
3. Fischer 1881: 170.
4. Ibid.: 155.
5. Bransford 1885: 77–78.
6. Bransford 1884: 803.
7. Strebel 1884: 239–44.
8. Exposición Histórico-Americana 1893: xxx.
9. Ibid.: 52–60.
10. Ibid.: 56–57.
11. Hartman 1907: 18–20.
12. Ibid.: 17, figs. 4, 5; 25–26, figs. 29–31; pl. 3, figs. 4, 5.
13. Lange 1984: 175.
14. Graham 1992: 176–88; see also chap. 3, this volume.
15. De la Cruz 1988: 115–30.
16. The Brooklyn Museum of Art's Minor Keith collection records were researched for information on provenance in 1997–98 by Lauren Ebin, of the Department of the Arts of Africa, the Pacific, and the Americas. See also Skinner 1920.
17. Stirling 1969: 240; Stirling and Stirling Pugh 1997: 18.
18. Corrales and Quintanilla 1996: 94–99.
19. Soto Méndez 1996: 108, 109, 129.
20. Lines 1942: 119.
21. Ibid.: 117.
22. Lange 1992a: 428–29; chap. 2, this volume; chap. 3, this volume.
23. Lange and Bishop 1986.
24. Hauff 1993: 102. Other essays in the same volume, *Precolumbian Jade* (Lange 1993b), deal with this and related issues.
25. The periodical *Vínculos, Revista de Antropología del Museo Nacional de Costa Rica,* published in San José since 1975, has been influential in making the new information available to a wider audience.
26. Guerrero, Vázquez, and Solano 1992: 29.
27. From an analysis of a myth among the Bororo of central Brazil by Claude Lévi-Strauss ("Bororo Song," Lévi-Strauss 1969: 59).



1. THE ARCHAEOLOGICAL CONTEXT OF JADE IN COSTA RICA

JUAN VICENTE GUERRERO M.

Costa Rica was one of the major centers for the manufacture and use of jade in Precolumbian America. The appearance of jade objects in the region occurred during periods of plenty, when social groups achieved surpluses, mainly of agricultural products, which allowed for a greater amount of free time to pursue other activities, such as the crafting of special objects in wood or stone and the building of permanent structures. There was a degree of social stratification, and rank was seen in the qualitative differentiation of artifacts associated with particular individuals. The appearance of jade objects marks the beginning of ranked or hierarchical societies in Costa Rica, whether they were lineages, clans, or chiefdoms.

The enormous importance of jade among ancient Costa Rican societies resided in its use as a symbol of rank. During certain activities it designated the wearer as a member of a particular group. The great quantity and variety of stones employed in carving artifacts into different shapes with different designs originated in the need for people of that time to incorporate these materials into their lives for social, economic, and/or religious reasons.

"Jade" is the generic name by which American archaeologists refer to carved stones and minerals of green color. The finest stone used by the ancient inhabitants of Costa Rica was jadeite, a sodium aluminum silicate that is found in different tonalities, ranging from white to emerald green. It is formed at great depths in the earth and comes to the surface primarily along tectonic fault lines. In Costa Rica no source of jadeite has been identified, although several have been postulated. One of the nearest sources is in the Motagua River valley in Guatemala, close to the border with Honduras. Mineralogical studies of several jades found in Costa Rica suggest a great degree of similarity with the Motagua River source, but other Costa Rican works do not seem to relate to it.[1] These latter specimens may be the result of the exploitation of a now-depleted ancient source or one that has yet to be located.

In Costa Rica archaeologists include other stones in the general category of jade. Serpentine, agate, chalcedony, opal, and quartz represent the greatest percentage of worked specimens. They are stones of highly varied color giving rise to the notion of "social jade," for it is postulated that the majority of users had some form of artifact made from these materials. These stones are found on the banks of rivers and beaches—along the Caribbean coast, in the southern zone of Costa Rica, in the northwest on the Pacific side, and in the central region of the country. The stones are not difficult to obtain, and even today modern craftsmen gather river pebbles in such places for their work. It is common to see rocks of green tonality and stones of other colors for sale in the shops in San José. Easily carved sedimentary rocks, including shales and argillites, were also used for artifacts, as were wood, bone, shell, and clay (for beads).

The techniques employed in Costa Rica to work the variety of green-colored stones were possibly introduced to the region from Mesoamerica, although an autochthonous development of jade-working techniques cannot be totally dismissed. The art of jade carving began in the

Plate 11. Bird-celt pendant from the Principal Tomb, Talamanca de Tibás site, San José Province. *Checklist no. 70*



Plate 12. One side of a cut jadeite pebble from Las Huacas site, Nicoya Peninsula. *Checklist no. 1*



Plate 13. Opposite side of the cut jadeite pebble in plate 12

Americas between the first and second millennia B.C. among Olmec groups in Mexico, and continued among the Maya. By about 500 B.C. jade-working had begun in Costa Rica, and if the techniques originated elsewhere, their introduction to Costa Rica must have occurred many years before that time. It has been suggested that their entry into Costa Rica might have taken at least two routes: by sea along the Caribbean coast to the San Juan River, then to the Plains of San Carlos and Guatuso, and the Upala Zone, and then to Guanacaste; or overland to the northwest Pacific region in what is now Guanacaste Province and from there extending to the Caribbean plains and the rest of the territory. The latter proposition is favored because the earliest date associated with jade

comes from the northwest (La Regla site). The Caribbean region has yielded many "reworked" jades.

There are thus two important Costa Rican jade-working and -using centers, with deeply rooted traditions. One is in the area known archaeologically as Greater Nicoya. In Costa Rica this corresponds to Guanacaste Province, especially the Nicoya Peninsula, and the other jade-working region is in the Caribbean plains region, primarily the area archaeologically known as Línea Vieja. Línea Vieja runs from Siquirres in the south to Guápiles in the north, then swings back toward the Jiménez River and the Guácimo area. Jade objects appear elsewhere in the country but not in the quantity seen in these two regions, and it is unlikely that manufacturing centers existed outside them. Jades discovered elsewhere must have been obtained through exchange or trade.

Stone-working begins with the discovery of a source of raw material. If the stone is large, a manageable block must be extracted, using tools such as hammer stones and chisels. Later, the extracted block is worked against another stone, such as sandstone, with water. Pieces are then sliced from it by sawing with a "saw" consisting of plant fibers and/or strips of animal skin held taut by a piece of curved wood (fig. 5). This is used with water, and abrasives, such as ground quartz or sand. In figure-making, the perforations for the eyes, mouth, and legs that differentiate human and animal representations, were cut with drills with siliceous stone tips (fig. 6). Openwork areas, grooves, and other decorations begin with similar perforations and are continued with cord-sawing. Finally, the object is polished, perhaps with beeswax, plant fibers, or a piece of the same sandstone that was used as the polisher (fig. 7). While surviving examples of such tools and materials are scant in the scientifically controlled excavation record, recent archaeological work in northwestern Costa Rica offers suggestive information. In the cemetery of Finca Linares, located on the banks of the Tempisque River in Guanacaste (at a latitude that corresponds to the town of Comunidad), funerary offerings include several jades and other special artifacts that may be instruments linked to the process of jade-working (figs. 8, 10). They were found with objects actually in the process of manufacture—ear ornaments

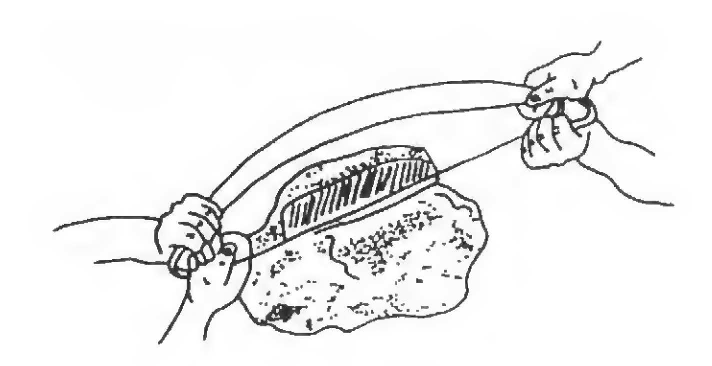


Fig. 5. Cord-sawing of stone block

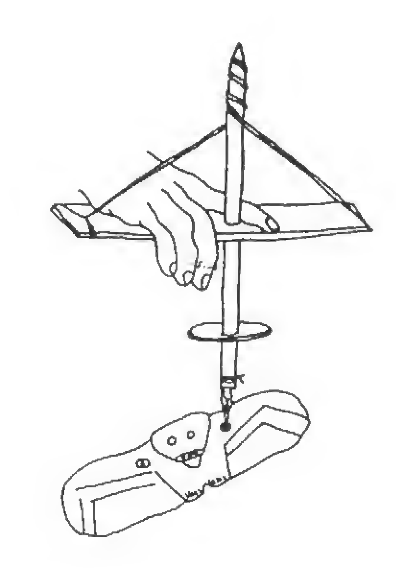


Fig. 6. Drilling details on a jade object

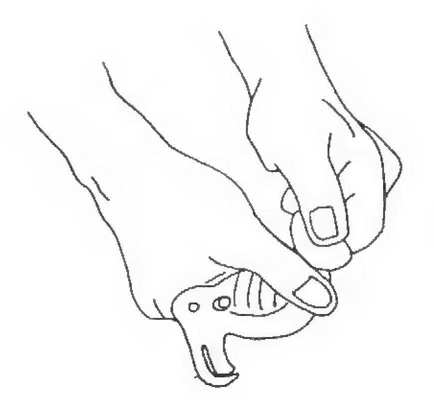


Fig. 7. Polishing a bird pendant



Fig. 8. Quartz drills and fragments discovered as funerary offerings in Burial R:C 3, Finca Linares site, Guanacaste Province



Fig. 9. Green slate fragments discovered as funerary offerings in Burial R:C 3, Finca Linares site, Guanacaste Province



Fig. 10. A polishing stone discovered as funerary offering, Burial R:C 3, Finca Linares site, Guanacaste Province

and a pendant fragment—made of a green-colored slate (fig. 9), and the individual buried with this assemblage has been identified as a jade craftsman:

> The funerary contents of [Burial] R:C 3, Operation 3, were a highly varied and unique lithic grouping. It consisted of small artifacts associated with a long bone, presumably a femur or a tibia . . . , incomplete or fragmentary ornaments, objects in the process of manufacture, and nuclei for working, all made of slate. There were polishers and punches of diabase and quartz, drills or fragments for making holes and incisions, chips and carving refuse of quartz, a long grinding stone of orthoquartzite for polishing or wearing down surfaces, a residue of ocher or iron oxide in the form of small balls presumably for polishing, and a small fragmentary monochrome vessel.[2]

The raw materials and the finish of some pieces in Burial R:C 3, Operation 3, are very similar to those from another feature at the same site (in Operation 1), reinforcing the argument that a specialist in jade-working was buried at Finca Linares.

Periods of Jade Use in Ancient Costa Rica

Jade-working and use lasted for more than a thousand years in Costa Rica, from about 500 B.C. to A.D. 900. Based on radiocarbon dates, contextual associations, and styles of materials, the three periods proposed for jade are: Initial Period—500 B.C.–A.D. 300; Florescent Period—A.D. 300–700; and Terminal Period—A.D. 700–900.

The Initial Period is characterized by the association of jade artifacts with metates, ceremonial mace or staff heads, and bichrome ceramics. Such groups have been found in Guanacaste Province, in the Central Valley, and on the Caribbean plains. Other contemporaneous features in the northwestern cemeteries located on hills

overlooking the Pacific Ocean include shaft and chamber tombs and secondary burials.[3] In the Central Valley similar contemporary tombs, known in the region as "bottle-shaped tombs," have been recorded, and jade and bichrome ceramics have been found in them.

Typical of the Florescent Period are the jades found in burials in circular stone mounds and in isolated tombs. The majority of these burials are flexed, meaning that the body was in a fetal position, although a few are extended, meaning that the body is placed full length. This type of cemetery has been recorded virtually throughout Guanacaste, on the northern and Caribbean plains, as well as in the Central Valley. The greatest quantity of greenstone artifacts are known from this period, as are Maya jades, slate disks, and marble vessels, as well as Mexican ceramics. Obsidian from Honduras and El Salvador also appears, reflecting the strong commercial ties with groups farther north. They all can be associated with local ceramics (including some early polychromes), metal objects, and other items.[4]

The Terminal Period is characterized by the scarcity of greenstone artifacts. In general, objects are cruder and smaller. Stones are less attractive than those used previously, and the work is less sophisticated. The vast majori-



Fig. 11. Bird-celt pendant discovered in Bundle Burial 4, La Regla site, Gulf of Nicoya. *Checklist no. 9*



Fig. 12. Bundle Burial 5, La Regla site, Gulf of Nicoya



Plate 14. Figure pendant from the pit at the base of Mound 2, Mercocha site, Williamsburg vicinity, Limón Province. *Checklist no. 104*

ty are miniatures such as beads and small figure pendants. The so-called stone cist tombs, found mainly in the central region and on the Caribbean and northern plains, belong to this period. Extended and or combined burials appear in reused pits. Associated artifacts include metal objects and polychrome ceramics.

The earliest-known worked jade in Costa Rica was discovered at the site of La Regla on the Gulf of Nicoya.[5] A jade pendant (fig. 11) was found in Burial 4, one of the sixteen secondary burials discovered there. The bundles containing human bones in secondary, or disarticulated, burials were in the tidal waters of the gulf, having originally been deposited in what was then a coastal swamp. Organic wrappings remained in some instances, and the bundles discovered at the greatest depth, Burials 4 and 5, were bound by bark strips or cords (fig. 12). They also contained the most artifacts. Bundle Burial 4 included 154 cylindrical wood beads that may have been strung with the jade pendant found with them. A wood stick of unknown use from Burial 5 was dated by the radiocarbon procedure to an average of 500±70 years before Christ.[6]

At the site of Monte Sele, on the banks of the Blanco River in Bagaces, Guanacaste, several jade pendants were associated with individual flexed burials in a stone funerary mound. A wide-ranging radiocarbon date of A.D. 450±320 was obtained.[7] A recent radiocarbon date comes from the Mamá Inés site, where jade artifacts have been reported, including one possibly in the form of a crude shell. On the slopes of the Orosí volcano, near La Cruz, Guanacaste, is the Mamá Inés cemetery, where the deceased were cremated and the remains deposited in funerary urns and jars. The tested sample comes from a deposit dating to A.D. 650±110.[8]

Excavations at the site of La Ceiba in the Tempisque Valley, Guanacaste,[9] confirm that the use of jade continues only until approximately A.D. 900. A few beads and a fragmentary pendant are associated there with a polychrome Papagayo vessel, Culebra variety, which is a ceramic type linked to the period. Similar dates apply to small beads found in a postulated food-preparation area for funerals. Yet another late radiocarbon date of A.D. 950±80 comes from La Ceiba.[10]

On the Caribbean side, the Línea Vieja region has produced other radiocarbon dates of interest. At Mercocha near Williamsburg, jades were found in association with El Bosque– and early La Selva–phase ceramics. One pendant (pl. 14) was in a pit at the base of a circular stone mound that also contained organic material dated by radiocarbon to A.D. 144.[11] Another date comes from the site of Porvenir with an identical association but with a later date, A.D. 279.[12]

At the Severo Ledesma site, on the outskirts of Guácimo, two radiocarbon dates of 50 B.C.±90 and A.D. 350±60[13] come from the fill of a large, rectangular El Bosque–phase house of stone cobble foundation beneath which several burials or caches were discovered. Twenty-seven ceramic and stone artifacts were associated with the largest burial and/or cache—no bone remained—which contained many offerings together with a necklace

of small blue-green disk beads and a large central pendant that could have been worn by the deceased.

In cemeteries at Severo Ledesma, other jades were unearthed,[14] including a bird pendant that was discovered just outside a river cobble tomb (pl. 15). Another necklace of soft-stone disk beads was in a burial at the later site of La Montaña in the Turrialba Valley. The necklace also had a central jade pendant with smaller pendants included at intervals throughout its length.[15] A radiocarbon date of A.D. 640±60[16] comes from this cemetery, where the quality of the greenstone recovered reflects the winding down of the lapidary tradition in jade in the Caribbean area.

Extant archaeological information on jades suggests that the period of greatest use and exchange occurs during the first six or seven centuries A.D.[17] After this time, jades decrease in number, and by about A.D. 900 few ancient Costa Ricans were using jade items.

Some of the jades found in Costa Rica were carved by Mesoamerican Olmec and Maya groups. Although it is not clear how or why these jade artifacts were exchanged with groups in Costa Rica, they occur in some numbers. Artifacts in other media are also present. Maya ceramics have been found at the site of El Carmen in Cañas, Guanacaste, and contemporaneous marble vessels appear at Nacascolo and other sites around the Bay of Culebra. Slate disks, a number of which display Maya glyphs, are also reported from Guanacaste Province.[18]

During this time it may have been high-ranking individuals, either of socio-political and/or religious importance in Costa Rica, who obtained these foreign artifacts and produced the reciprocal materials to engage in foreign trade. Some authorities suggest that trade in Mesoamerica was based on essentially utilitarian products or materials; others propose that sumptuous or luxury objects were exchanged.[19] Possible trade materials include a dye made from the Murex shell, a small mollusk found along the Pacific coast of Costa Rica, cacao beans, and plants used for medicinal purposes or as hallucinogens. Feathers from birds native to Costa Rica, wood for carving, and actual wood carvings might also have been offered in trade. The fall of Teotihuacán in Mesoamerica in A.D. 700 may have caused the decline of trade in jade and other materials from the north into Costa Rica.



Plate 15. Profile bird pendant from Severo Ledesma site, Guácimo vicinity, Limón Province. *Checklist no. 116*

The Context of Jade in Ancient Costa Rica

Jade objects that have been found in archaeological contexts are relatively rare, compared to the large number of such artifacts that have been obtained from plundered graves or through accidental finds. Many jades in museums and private collections in Costa Rica and abroad have no archaeological context. Only since the late 1970s has the number of jades from scientifically controlled excavations increased, thanks to systematic regional investigations and to archaeological salvage work. There are now more than three hundred jade objects with archaeological contexts from approximately sixty Precolumbian sites throughout Costa Rica. Guanacaste and the central piedmont and plains of the Caribbean have yielded the greatest number of artifacts.

Archaeological excavation demonstrates that 99 per-



Plate 16. Three figure-celt pendants from Burial 11, Monte Sele site, Guanacaste Province. *Checklist nos. 17, 18, 19*



Fig. 13. Detail of Burial 11, Monte Sele site, Guanacaste Province



Fig. 14. Tomb 1, La Isla site, Guanacaste Province

cent of the jade artifacts found in controlled circumstances come from cemeteries or relate to funerary remains. They have been encountered in domestic contexts, such as houses and cooking areas, on only a few occasions, and their presence may be accidental—perhaps the result of breakage, a chance fall, or loss due to small size. This does not mean that jade artifacts functioned solely as mortuary and ritual objects, but rather that jade's significance lay in its social and religious nature.

Jade was made into necklaces, pendants, and ear ornaments, and while the identity of the individuals who



Plate 17. Olmec shell-form pendant from the Principal Tomb, Talamanca de Tibás site, San José Province. *Checklist no. 64*

used it is not clear, it seems that usage was not restricted to age or sex. In Burials 9, 44, and 46 at Monte Sele, the interred were identified as children between the ages of two and six, all of whom wore jade artifacts. The same occurs with adults, both men and women, at this and other sites. In general the objects are at neck or chest level, indicating use as necklaces or pendants. In the majority of stone-covered cemeteries excavated in Guanacaste, the burials such as Burial 11 at Monte Sele (fig. 13 and pl. 16) held flexed corpses with jade artifacts at the neck.

Tombs in Costa Rica with jade vary in size and type. Some are individual tombs, such as the stone-lined Tomb 1 at La Isla site, Cañas, Guanacaste (fig. 14), or the long, juxtaposed rectangular ones of Severo Ledesma and La Montaña. Others are made of rocks or river stones and ignimbrites piled into large mounds, suggesting the considerable energy invested in sending off the dead. It was necessary to transport the stones over distances for these cemeteries, an indication of organizational ability and the importance of particular individuals. Some tombs are deep pits measuring 3 to 7 meters (10 to 23 feet) in depth. The depth and presence of stones in quantity indicate that individuals of status are buried there, as do the amounts and quality of the funerary offerings.

An important tomb was excavated by the Museo Nacional de Costa Rica at the site of Talamanca de Tibás, located about 7 kilometers (4½ miles) outside San José in the Central Valley, in 1977. Judging by the offerings, it was a cemetery of high-ranking individuals. One tomb, that is now called the Principal Tomb, contained three metates (fig. 15), on which the interred individual had been placed (fig. 16), two ceremonial mace heads (fig. 17), a tripod ceramic vessel missing its legs (fig. 18), and two jades, one of them a Mexican Olmec piece in the shape of a clamshell (pl. 17), the other, a Costa Rican bird pendant (see pl. 11). This type of burial is known from controlled excavations at other Central Valley sites such as La Fábrica near Grecia, Alajuela Province, and Cenada, Heredia Province. Recently it has also appeared at a site 15 kilometers (9½ miles) west of San José, La Ribera de Belén.[20] Another burial at Tibás, Tomb C, was an interment that included a ceramic effigy in the shape of a monkey (pl. 18). It was a bridge-and-spout vessel in a variety of Rosales Zoned Engraved, a ceramic type made in the first centuries A.D. in northwestern Costa Rica. A single jade







Fig. 15. Three ceremonial metates from the Principal Tomb, Talamanca de Tibás site, San José Province. *Checklist nos. 73, 74, 75*



Fig. 16. Principal Tomb, Talamanca de Tibás site, San José Province

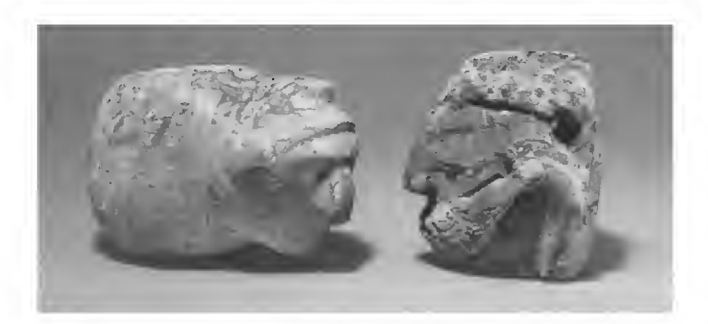


Fig. 17. Two mace heads from the Principal Tomb, Talamanca de Tibás site, San José Province. *Checklist nos. 71, 72*



Fig. 18. Broken ceramic tripod vessel from the Principal Tomb, Talamanca de Tibás site, San José Province. *Checklist nos. 76*



Plate 18. Monkey vessel from Tomb C, Talamanca de Tibás site, San José Province. *Checklist no. 77*



Plate 19. Bead from Tomb C, Talamanca de Tibás site, San José Province. *Checklist no. 78*



Plate 20. Three tubular beads from Tomb 1 at La Fábrica site, Alajuela Province. *Checklist no. 79*



Fig. 19. Burial at Las Delicias site, Playa Garza, Nicoya Peninsula

bead (pl. 19), at some distance from it, accompanied the monkey. Three more beads come from Tomb 1 at the Central Valley site of La Fábrica (pl. 20), where the deceased was placed on three metates in a manner similar to that of the Principal Tomb at Tibás.

The assemblage of metates, jades, and ceremonial mace heads represents one of the first indicators of high rank or status in Costa Rica. Such an assemblage is also found in Guanacaste burials, appearing at the sites of Las Huacas and Nosara on the Nicoya Peninsula. At Las Delicias near Playa Garza, another site on the Nicoya Peninsula, many metates were discovered placed upside down over the deceased (fig. 19).

While certain individuals had abundant, fine-quality jade offerings, the majority used a form of jade that simply identified them as a member of a specific group or clan. This is inferred from the site of Ballena on Playa Tambor, Nicoya Peninsula, where several tombs held offerings of jade that consisted mostly of representations of a mammal known as a *pizote* (coatimundi; fig. 20). The members of a particular group may have been identified with this animal and wore its effigy as an emblem of affiliation. Perhaps because of the enormous quantity of stone used in this manner, access to foreign raw materials was necessary.

A documented trade commodity, which was imported from the north during the period of jade use, is obsidian. At Mamá Inés, funerary urns containing cremated remains were buried together with jade (fig. 21) and prismatic obsidian blades. Analyses of ten obsidian samples from various sites in the Central Valley, in Guanacaste, and in other regions of the country, demonstrates that the raw material came from two sources, one in Honduras (Güinope) and the other in Guatemala (Ixtepeque). It seems that obsidian was traded as both finished artifacts and raw material. Obsidian implements were also made locally, as can be seen by the obsidian core that is on exhibit in the Museo Nacional de Costa Rica.

The grouping of jade with *manos* (grinding or hand stones), metates, celts (axes), early polychrome ceramics, metal objects (gold-copper alloy), and obsidian has been recorded at several sites. At Finca Linares, metal and jade

objects were found together. At least six funerary deposits have been reported with jade and three tombs with objects of gold-copper alloy (fig. 22). Two tombs held objects of both materials:

> In [Burial] R:C 12 two gold pendants had been placed on either side of one of the two identified skulls. A green basalt bead was also recognized within the assemblage. Based on the field report, it is difficult to establish to which of the two individuals the bead pertained. In [Burial] R:C 18 the individual was interred in flexed position, with three metal pendants and two of serpentine close to the neck. . . . This individual offers one of the most abundant funerary assemblages recorded in Operation 1. In addition, there were carved metates and polychrome vessels of Galo and Carrillo polychrome ceramic.[21]

This highly significant grouping shows the two important traditions of special object use in Costa Rica. Symbolic in character and socially prestigious, gold and jade use have different sources of origin, the former in the south, the latter in the north. Although it is difficult to determine a precise time frame, these traditions apparently overlapped, as certain individuals wore both. In Costa Rica, gold objects are often erroneously regarded as late in time, replacing jade ones. In fact, during the late Florescent and Terminal periods of jade use, certain individuals had access to both.

Polychrome ceramics and jade buried together are very rare, although this does occur at the site of La Ceiba in the Tempisque Valley, Guanacaste, where jade pendants were found with a piece of polychrome Papagayo ceramic, Culebra variety, dating to A.D. 800–1000. At Finca Linares, jade found together with Carrillo and Galo polychrome ceramics date to A.D. 600–800. As polychrome ceramics from Guanacaste are the most reliably dated, their presence helps determine the terminal date for the working and use of jade.

Representations on Jade Objects

The indigenous peoples who worked jade in Costa Rica



Fig. 20. Coatimundi pendants from Ballena site, Playa Tambor, Nicoya Peninsula



Fig. 21. Jade objects discovered with obsidian blades in a funerary urn from Mamá Inés site, Guanacaste Province



Fig. 22. Pendants of gold-copper alloy found with jade objects from Finca Linares site, Guanacaste Province

created a wide variety of figures, motifs, and symbols that allude to human and animal forms, all found in the surrounding environment. Mammals, birds, reptiles, and frogs are prominently featured. This distinguishes ancient Costa Rican jade from Mesoamerican jade; realistic human representations, such as portraits of warriors, priests, and chiefs, usually appear on Mesoamerican jade. In Costa Rica, designs are also more abstract than elsewhere, as they combine aspects of various creatures in mythico-religious representations.

Generally, in Costa Rican jades there is a high percentage of human representations in symbolic form. In some cases only one image is shown; in others the main figure is combined with an animal or with a celt shape in the lower part. This type of object has long been called an "axe-god." Axe-gods, which were never functional objects, serve a symbolic purpose, linked to fertility concepts in part by their similarities to tools used in agriculture. The human-figure celt representations can include costume elements—headdresses, coiffures, or ceremonial plumage, for instance. Some human–animal composites are highly stylized and thus difficult to identify.

Combinations of humans and birds—songbirds, nocturnal birds, birds of prey or scavengers—are common. Birds are seen as communicators, in a figurative sense, between the earthly and celestial realms, part of mythic communication. The turkey buzzard and the harpy eagle command respect because of their size and their roles as predators and scavengers. They are said to have a close relationship with the "magical flights" of spiritual leaders or shamans. The majority of bird pendants are thought to represent the shaman's "alter ego," a sort of life-giving soul that each individual has from birth to death.

Other animals are reptiles, including crocodiles, tropical lizards, iguanas, and serpents. Their images are thought to be related to fertility, because of their association with water, as well as to life and death. Frogs and toads are also linked to fertility but are represented less frequently. The magical aspect of these animals resides in their relationship with water and the night. Bats too are believed to have a special meaning but are linked to darkness and death because of their ability to fly at night and to live in dark caves. Rattlesnakes, as musical, rhythmic reptiles, announce misfortune and death. Monkeys, felines, and coatimundis also form part of the imagery of ancient Costa Rican lapidary work. These representations are interpreted as reflections of various local species.

The Function of Jade

Jade was used for special artifacts such as ear ornaments and necklaces, and for small vessels in which poisons or drugs were possibly stored and transported. This type of artifact may have been linked to shamans or other specialists. At the site of Orocú, on the east side of the Gulf of Nicoya, excavations of Burial 14 revealed an individual accompanied by one of these jars (pl. 21 and fig. 23). Other diminutive artifacts—ceramic vessels, a peccary, human figures, and ocarinas—reinforce the idea that they belonged to a particular individual.

Jade had a "mythico-religious" function. The larger, better-worked pieces, made of jadeite, must have belonged to shamans, chiefs, and other important individuals. Lower-ranking members of the population had objects of lesser quality in terms of raw materials and craftsmanship. Yet they participated in the wearing of jade because it signified position or ethnic identity. After the Spanish conquest, jade was thought to have curative



Plate 21. Container from Burial 14, Orocú site, Puntarenas Province. *Checklist no. 51*



Fig. 23. Burial 14, Orocú site, Puntarenas Province

properties and was applied to the back to relieve kidney pain. It was also used to prevent negative influences known as the "evil eye," and a recent study of Costa Rican jade concludes that "jade was seen as a talisman possibly worn by chiefs or shamans, a sacred substance that legitimized the power of the elite and probably was part of the visual display of their wealth or status. Thus, jade was a prerequisite for admittance to the afterlife, which they believed to be socially hierarchic."[22]

* * *

Despite the large quantity of lapidary work in jade and other greenstones produced in Precolumbian Costa Rica, little more than three hundred jade artifacts have been recovered by archaeologists in their original, undisturbed contexts. These crucial, scientifically controlled recoveries—with the directly associated ceramic and stone objects and the occasional radiocarbon date—permit the interpretation and relative dating of the great number of jades in museums and other collections that have little or no contextual data.

The periods of jade use proposed here cover some 1,400 years, from about 500 B.C. to A.D. 900, a length of time that may explain the huge number of objects produced. Lapidary production was at its height during the Florescent Period (A.D. 300–700). Fewer jades were fabricated during the Initial Period (500 B.C.–A.D. 300), and the last, the Terminal Period (A.D. 700–900), saw a drastic decline in refinement and technical capability. While the reverence for jade and the making of important symbolic and ritual objects from it were probably the result of Mesoamerican contacts initially, the ancient Costa Ricans developed a distinctive lapidary tradition of their own, varied in its use of material, prolific in output, and stylistically sophisticated.

Acknowledgments: This article has been written with the collaboration of several people. In excavation fieldwork and surveying, I relied on the aid of Federico Solano Bonilla. Archaeologist Felipe Solís del Vecchio excavated several sites where jade was found that are mentioned in this article. I would also like to thank Ifigenia Quintanilla, head of the Department of Anthropology and History of the Museo Nacional de Costa Rica, for her support and interest in the completion of this article. The contribution of Francisco Corrales, an archaeologist on the staff of the Museo Nacional de Costa Rica, deserves recognition. He read an earlier version of this manuscript and made valuable suggestions. Michael J. Snarskis contributed data to this paper and revised an early version and the galley proofs. Finally, I wish to thank Irma Muñoz Marchena for her help in preparing the first version of this text.

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2. Herrera n.d.: 12.
3. Guerrero 1993: 199, fig. 14.9.
4. Guerrero, Solís, and Vázquez 1994: 103–106.
5. Guerrero, Vázquez, and Solano 1992.
6. Beta Analytic, 35853.
7. Beta Analytic, 69281.
8. Beta Analytic, 71174.
9. Guerrero and Blanco 1987.
10. Beta Analytic, 15100.
11. Stirling 1969: 240; Stirling and Stirling Pugh 1997: 18.
12. Stirling 1969: 243; Stirling and Stirling Pugh 1997: 24–25.
13. UCLA 2175-D and UCLA 2175-C respectively, Snarskis 1984a: 212.
14. Guerrero 1993: 196, fig. 14.5.
15. Snarskis 1978: fig. 146B-t.
16. UCLA 2113-E, Snarskis 1984a: 221.
17. Guerrero 1993.
18. Stone and Balser 1965; Stone 1977: 64–65.
19. Willey 1984: 373–74.
20. Javier Artavia, personal communication.
21. Herrera n.d.: 11.
22. Reynoard 1996: 153.



2. MESOAMERICAN JADE AND COSTA RICA

MARK MILLER GRAHAM

Mesoamerica is one of two great areas of complex society and urban civilization in the Precolumbian world, the northern counterpart of the Central Andes or Peru in South America. Costa Rica, on the other hand, has never been regarded as more than a slice of the periphery of the high culture area to its north. Even before the definition of an explicit Mesoamerican culture area by the German archaeologist Paul Kirchhoff in 1943, Costa Rica and its neighbors were regarded as exemplars of a different kind of prehistoric society, on a far different scale from that of the expansive urban societies of the Aztecs and the Inkas and their predecessors.[1] Notwithstanding the differences in scale, which were obvious to anyone who knew the archaeology and its literature, Costa Rica, Panama, Colombia, and the rest of what came eventually to be called the Intermediate Area did not suffer from a lack of scholarly interest in their archaeological past, in part, perhaps, because of intense interest in their visual culture. The prehistoric pottery of Costa Rica, for example, was the subject of the dissertation of the great Harvard archaeologist Samuel Kirkland Lothrop, and throughout his august career, he continued to work in Mesoamerica (a term he may never have used) and in Costa Rica, Panama, and Peru.[2] His student Doris Stone devoted her scholarly life to pioneering studies of the archaeology and ethnography of non-Maya Honduras and Costa Rica, neither of which has been regarded as a significant constituent of Mesoamerica.[3]

Because Costa Rica has for so long been regarded as an "Other" of Mesoamerica, its relationship to Mesoamerica was typically imagined as one of dependency, in which it was expected that cultural influences would flow largely from the more complex to the less complex, from Mesoamerica to Costa Rica, an attitude that was reinforced when, rarely, there was evidence for actual population movements, as with the so-called Pipil-Nicarao migrations after the fall of the Classic period civilizations of Central Mexico in the eighth century. Although Costa Rica was actually the scene of some of the earliest stratigraphic archaeological excavations in the Americas, as in the work of the Swedish scholar Carl Victor Hartman soon after 1900,[4] much subsequent work focused more on gathering artifacts for museum collections than on establishing the basic space-time systematics that are the foundation of archaeology. The true temporal depth of ancient society in Costa Rica did not begin to be understood until the 1960s, with the work of Michael Coe (United States), Claude Baudez (France), and Wolfgang Haberland (West Germany).[5] Coe and Baudez, in particular, aimed more at locating and defining the southern frontiers of Mesoamerica than at establishing countrywide sequences, and both eventually concentrated on the archaeology of the Maya. Haberland's concession was in the southern part of Costa Rica, and his primary interest was in exploring the relations with western Panama. Through the 1970s and into the 1980s, archaeological investigation in Costa Rica was limited by a paucity of funds and the demands of salvage and rescue in the face of both urban expansion and rural deforestation. Only the northwestern part of the country, the province of Guanacaste (also called the Nicoya region), has acquired anything like adequate regional coverage, at least for ceramic types, whose dating and associations are important in constructing the outlines of prehistoric cultural change. Unfortunately, the decades-long emphasis on collecting has meant that much of Costa Rica's archaeological heritage remains

Plate 22. Olmec hand-paw-wing pendant from Guanacaste Province. *Checklist no. 62*



Fig. 24. Olmec "baby" figure, probably made in Central or Gulf Coast Mexico but said to have been found at Playa Potrero, Guanacaste. Early Formative Period (500–900 B.C.) Ceramic, H. 29.5 cm (11¾ in.). Museo del Jade, San José (INS 6419)

substantially without documentation, and perhaps there are no artifacts, aside from gold objects, more lacking in the basic facts of archaeology than those of jade or greenstone.

When Columbus named this country the "Rich Coast," he could not have known that it contained in abundance the two most precious materials of the Precolumbian world—jade (or greenstone) and gold. The European conquerors knew all about gold, and their lust for it was an engine of conquest. But jade was foreign to them, and only gradually did they come to understand that for the Mexican and Maya civilizations it was the most precious substance of the natural world. The Aztecs called it *chalchihuitl*, and the Maya *ya'axil tun*.

In Mesoamerica, small pieces of greenstone and jadeite may have been worked into beads as early as 1500 B.C., but there does not seem to have been any significant figural carving in these hard stones until the end of the San Lorenzo phase at the great Olmec site of San Lorenzo, Veracruz. This occurred about 1000 B.C., at the end of the Early Formative period. Hardly any greenstone was found at San Lorenzo in the excavations directed by Michael Coe and Richard Diehl in the late 1960s,[6] nor is it certain that any jadeite was found. The Olmec lapidary tradition is essentially a product of the Middle Formative period, after 900 B.C., and is still associated primarily with the excavated finds at the site of La Venta, Tabasco, and with a huge but undocumented hoard reportedly from Río Pesquero, Veracruz.[7] It must have been at the beginning of this period that the only documented geological source of jadeite in Mesoamerica was discovered along the middle reaches of the Motagua River in Guatemala and exploited on a significant scale.

The corpus of images and motifs associated with this large-scale lapidary tradition of the Middle Formative period is complex.[8] Some features clearly predate jade carving and thus represent a transfer of imagery from one medium to another, such as the paw-wing-dragon motif taken from ceramics. As archaeologist David Grove has noted, the appropriation of imagery and information from ceramics probably represents a significant social restriction within local groups.[9] Other features, such as the distinctive physiognomy and facial features associated with figures depicted in jade, may have been largely derived from the figural canon in use at Gulf Coast sites such as San Lorenzo and La Venta. The small-scale bead industry of the Early Formative period provided some basis for lapidary technology, but probably not the inevitable working secrets represented by the finest pieces of the Middle Formative period. And this technology was not monopolized. There is simply too much jade and its imagery is too diverse to imagine that Gulf Coast centers produced all of it. Rather, the opening of the Motagua source in Guatemala must have led to a rapid expansion in the amount of material available, and this may in turn have spurred searches for other sources of greenstones.[10] The Precolumbian taxonomy of greenstone was never geologically sound. There was a taxonomy of stones based on color,

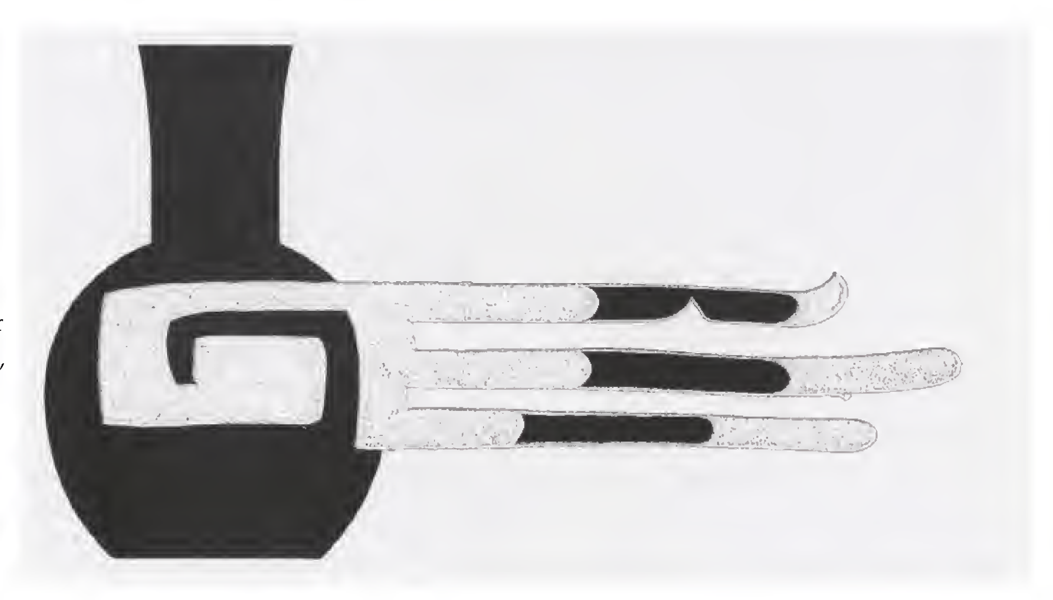


Fig. 25. Roll-out drawing of an incised hand-paw-wing motif on an Early Formative Period (1500–900 B.C.) ceramic bottle said to be from Las Bocas site, Puebla, Mexico. H. of bottle: 19.7 cm (7 ¾ in.) New York, The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Purchase, Anonymous Gift, 1963 (1978.412.104)

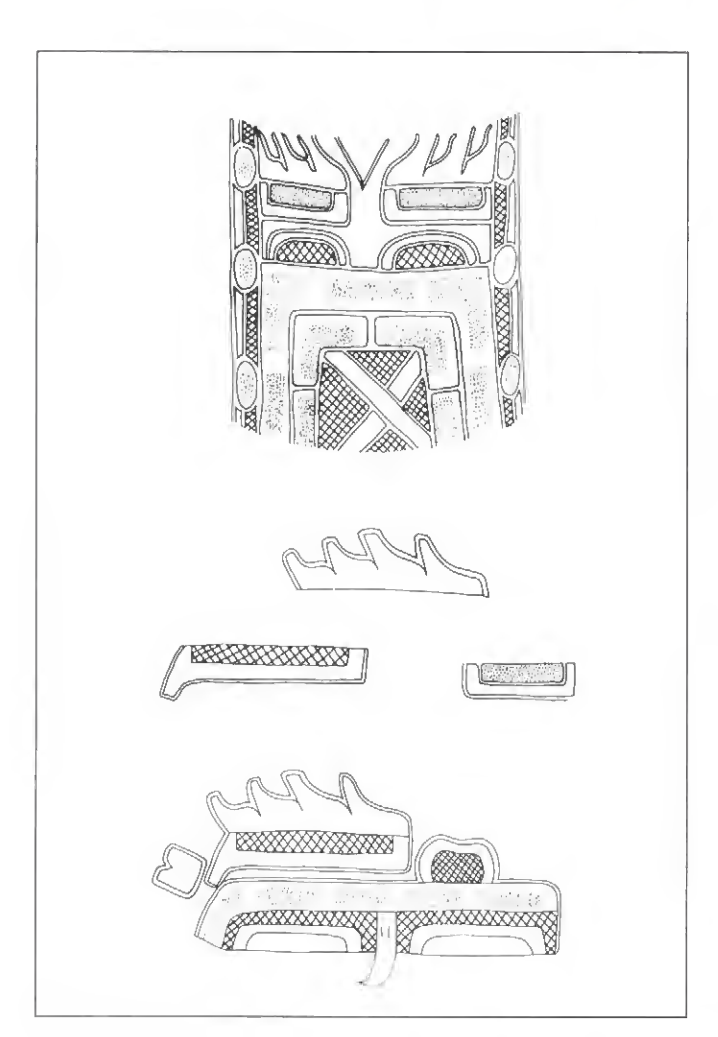


Fig. 26. Rendering of the components of the Olmec Dragon. (From *The Olmec World* 1995: 120). Courtesy, The Art Museum, Princeton University

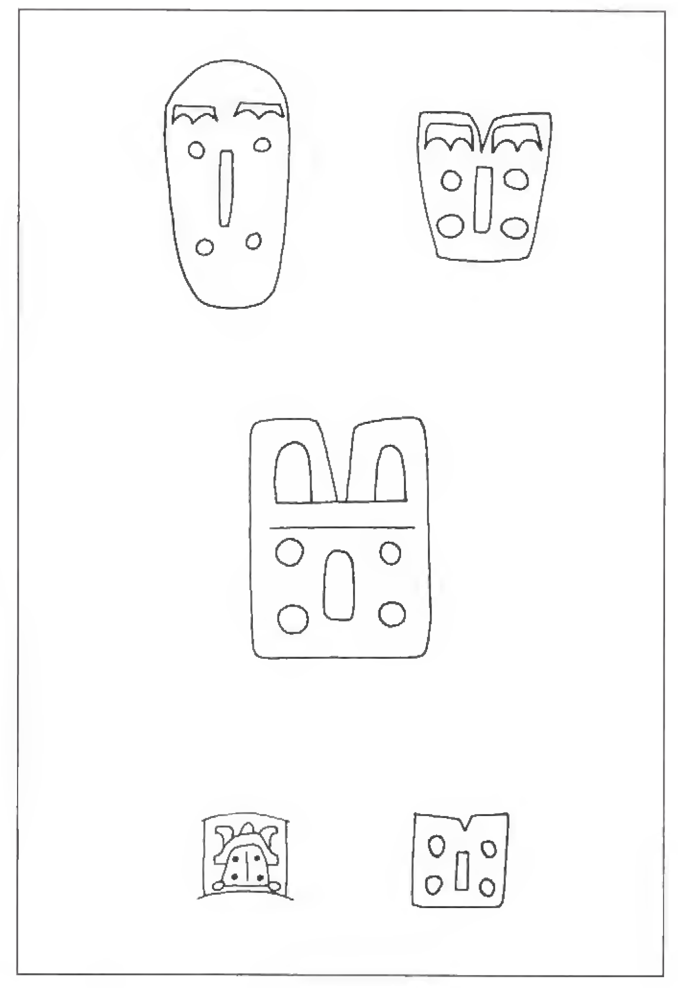


Fig. 27. Rendering of the Olmec *quincunx* or four-dots-and-bar motif. (From Joralemon 1971: 33, fig. 85). Courtesy, Dumbarton Oaks Research Library and Collection, Washington, D.C.

and probably hardness, that was largely impressionistic and superficial. Even the Aztec-Mexican categorization, which is by far the most detailed and probably preserves much of the ancient highland Mexican lore about greenstones, was based largely on color and the attribution of magical properties.[11]

Olmec-like ceramics and jade appeared at about the same time at Copán, virtually at the southern edge of Maya territory and Mesoamerica, long before this site achieved political prominence. This development apparently represents an early and somewhat precocious adoption of "Olmec" imagery and values by what was then a polity whose small size was countered by its proximity to the Motagua jade source. The ceramics were locally made but adopt with some variation the ceramic imagery found at San Lorenzo and widely dispersed throughout Highland Mexico. The early date of jade and pseudo-Olmec ceramics at Copán might support the older model that linked the spread of Olmec art to the search for raw material sources and local alliances.

Olmec Jade in Costa Rica

Even after more than half a century of continuous academic debate, there is no consensus on the nature of Olmec civilization, culture, and art. The ethnic dimensions of Olmec art continue to be a source of discussion and disagreement. Does the distinctive Olmec art style reflect the civilization of a distinct people with its own culture and language, or is it a wider phenomenon to which different ethnic and linguistic groups contributed? Two recent exhibitions and their lavish catalogues reveal remarkably divergent points of view within the scholarly community in the United States and Mexico. In the 1960s, archaeologist Michael Coe, a pioneer in Olmec archaeology and in the study of Olmec art, popularized the idea that Costa Rica, along with western Mexico, might have been a source of the blue-green jade apparently prized by the Olmec, but not common elsewhere except in the art of Costa Rica.[12]

In the ensuing decades, a number of examples of Olmec or Olmec-like jade, reportedly from Costa Rica, appeared in collections in Costa Rica and in the United States, but without reliable archaeological data. These works nonetheless seemed to support Coe's suggestion that Costa Rica was one of the geological sources of the stone the Olmec loved so much. In addition to the dozen or so pieces of jade in the Olmec style that have been reported from Costa Rica, there is one ceramic, a reasonably canonical-looking white-slipped Olmec "hollow baby" figure of the type known in the Early Formative period in Highland Mexico and San Lorenzo (fig. 24). The figure was brought to the Museo Nacional de Costa Rica in the spring of 1977, supposedly having been illicitly excavated in Guanacaste Province. Yet there is still no Olmec-like rock art, cave art, or monumental sculpture reported from Costa Rica, so there is no evidence for a contemporaneous Olmec presence in Costa Rica, unlike the situation at Copán. Nor is there archaeological evidence to suggest that any of the supposed Olmec objects in Costa Rica arrived there contemporaneous with their manufacture. Actually, there is no clear archaeological context for the local practice of jade carving in Costa Rica before 300 B.C., and even that date is uncertain.

Hand-Paw-Wing Pendant (Pl. 22)

The paw-wing image, or more accurately the hand-paw-wing, is one of the earliest iconographic signatures of the Olmec representational system; it is found in fine, incised pottery cups, bottles (fig. 25), and bowls before it appears in jade. At San Lorenzo this feature occurs in ceramics of the San Lorenzo phase (1150–900 B.C.), in a ware called Calzadas Carved, one of the two diagnostic ceramic types of this phase.[13] Calzadas Carved is perhaps an intrusive ceramic type; it shows much of the Olmec graphic system already in place and is closely related to hard, white-slipped ceramics from Chalcatzingo, Las Bocas, Tlatilco, and the Oaxaca valley. Hollow baby figures, like the one found in Costa Rica, are a marker of this period.

The paw-wing feature commonly occurs as one of the markers of the Olmec celestial dragon, frequently appearing in association with flame eyebrows and a crossed-bands feature that denotes the sky. This jade representation of the paw-wing, missing the "thumb," is one of the most extraordinary examples of jade carving from ancient America. The slots between the dragon's digits were opened up first by drilling, then extended by cord-

sawing, and finally evened out by abrading and polishing. Small bars remain to connect the ribbons of jade.

The palm of the paw-wing, which is sometimes shown as a spiral, is here represented by a puzzlelike composition of the head and body of the Olmec cosmic dragon: the reclining L-shaped eye, the flame eyebrows, and a V-cleft mark the head of the cosmic dragon (fig. 26), and four disks mark its body (fig. 27). The body of the dragon is thus transformed into a representation of the *quincunx* (or four-dots-and-bar sign), which stands for the four sides of the cosmos and the middle world axis.[14] This perhaps unique object thus exemplifies Grove's remark, noted earlier, about the transformation of the message accompanying the change in material: in place of the iconic legibility of modeled ceramic dragons, and the still-legible abbreviated paw-wing, here the image of the dragon is only accessible through decoding.

Two Flanged Pendants (Pls. 23, 24)

These two figures are commonly called winged figures, but the lack of agreement about what kinds of wings are represented suggests that the neutral term "flanged pendant" might be more helpful, at least initially. Flanged pendants consist of a central head or body with lateral



Plate 23. Olmec winged-figure pendant reportedly from the Guanacaste Cordillera, Guanacaste Province. *Checklist no. 60*



Fig. 28. Olmec pectoral and/or headband jewel, said to come from northern Yucatán, Mexico. Middle Formative Period (900–400 B.C) Quartzite, H. 9 cm (3½ in.) Dumbarton Oaks Research Library and Collection, Washington, D.C. (B-538)



Fig. 29. Central figure from the Middle Formative Period (900–400 B.C.) Altar 5, La Venta site, Tabasco, Mexico, with a flanged headband jewel on its headdress. Parque Museo de la Venta, Villahermosa

projections. They were worn at La Venta as headband jewels by Olmec rulers. The figure seated in the cave mouth of Altar 5 at La Venta wears a headband jewel (fig. 29) consisting of a central supernatural Olmec face (the typical snarling infantile face) below three raindrop or seed signs, an early version of the triadic Jester God jewel of the Maya.[15] Flanking the Olmec face or mask on each side is a crossed-bands sign that denotes the sky and the celestial realm. In later Maya contexts, the crossed-bands sign denoted sky, snake, and the cosmic number four, because of a widespread homophony for these words in most Maya languages. A near analogue of the depicted La Venta jewel is a quartzite pectoral at Dumbarton Oaks (fig. 28), an object that approximates in size the object worn by the La Venta Altar 5 figure. This pendant or pectoral lacks the raindrop or seed motifs, replacing them with a V-cleft, itself a common indicator of fertility and growth. The La Venta Altar 5 headband jewel is shown wrapping around the head, as if individual components were actually attached to the headband. The Dumbarton Oaks object may thus be an image of the original multipart assemblage.

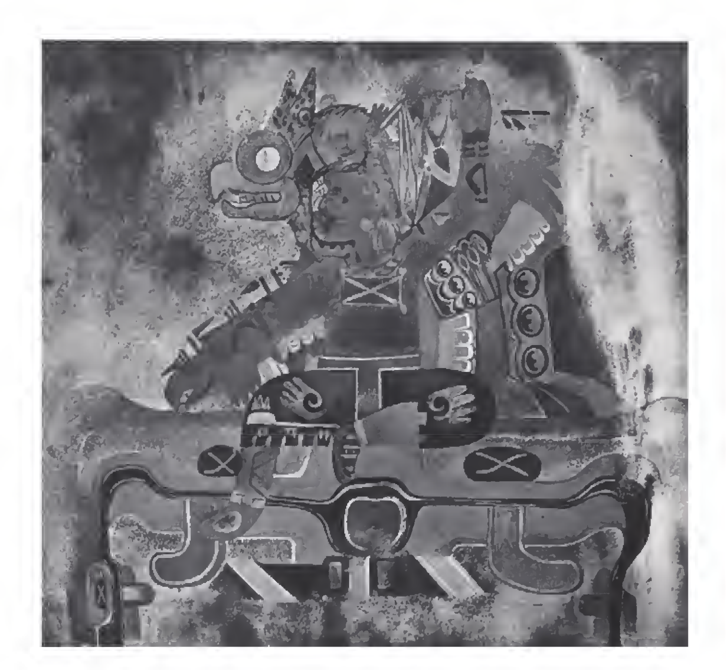


Fig. 30. Rendering of the Early or Middle Formative Period (1500–400 B.C.) Olmec Mural 1, Oxtotitlan Cave, Guerrero, Mexico.(From Grove 1970: frontis.). Courtesy, Dumbarton Oaks Research Library and Collection, Washington, D.C.



Plate 24. Olmec winged-torso pendant reportedly from Costa Rica Farm site, Guápiles vicinity, Limón Province. *Checklist no. 61*

The two flanged figures here can be shown to relate to this meaning cluster. The flanges of one (pl. 23) have been identified as the wings of a bat and those of the other (pl. 24) as the wings of a butterfly, but with little comparative support. Both figures instead may be wearing a costume that consists of a cape and wings, like that of the seated lord in the cave painting at Oxtotitlan, Guerrero (fig. 30). The ruler, his rank indicated by his nose bead, wears the costume of an avian supernatural, with the feathered edges of the wings of the cape rendered as a scalloped pattern, and with parts of the wings studded with inset disks containing either double-merlon or cloud signs, or perhaps both, if they were visual homophones. The disks are nestled under the scallops of larger signs that are clearly clouds. A more irregular cloud sign lies directly above the ruler's head, in the place of the headband jewel. A similar scalloped cloud design is found on a much-reworked jade in the Chacsinkin hoard from Yucatán, perforated so that it could have been securely attached to a costume (fig. 31).

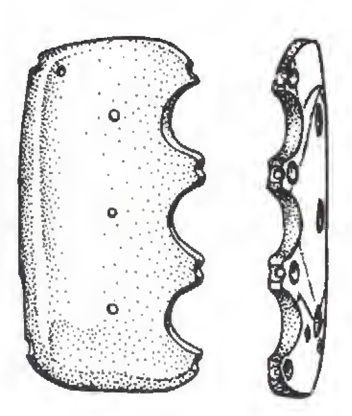


Fig. 31. Drawing of front and side of a Middle Formative Period (900–400 B.C.) ornament with scalloped cloud design, showing drilled holes, from the Chacsinkin cache, Yucatán, Mexico. H. of jade: 4.8 cm (1⅞ in.) Museo Regional de Antropología de Yucatán, Mérida. (From Andrews 1986a: 20, fig. 5b). Courtesy, Middle American Research Institute, Tulane University

The flanges of the pendant in plate 23 perfectly match the design inset within the disks of the Oxtotitlan figure's

wings and closely match the Chacsinkin "cloud" jewel (which has one more scallop). The short skirt or kilt worn by the pendant figure also has a very abstracted image of another Olmec dragon, the terrestrial counterpart, flanking a cleft seed or celt design in the center, over the genitalia. (Again, there may be an intended visual homophony.) The Oxtotitlan figure wears essentially the same garment as the figure in plate 23: his skirt or kilt adds only a three-pointed mark on the figure's right side; the left side is obscured by the bent leg. A paw-wing sign with the spiral palm marks each knee, and the seed/celt sign is replaced or obscured by the T-shaped loincloth or penis cover.

The flanged figure in plate 23 epitomizes the seated ruler of Oxtotitlan and his regalia, as particular attention is paid to the cloud-wings and the terrestrial dragon skirt, which explicitly associates the genital area with the progenitive cleft. Normatively, this figure must be understood as male, but with the progenitive capacity, the cleft place, of a female; in other words, a Mother-Father.[16]

The companion piece (plate 24) has a nearly three-dimensional head above flat flanges with scalloped, cloud-form contours, and an incised upper torso and arms. As with the Chacsinkin jade cloud jewel, the tips of the scallops here were drilled for attachment (one hole is broken through), presumably as a headband jewel. The head of this partial figure more closely approximates the snarling visage of the La Venta Altar 5 headband jewel. Like it, the design is triadic, in this case a central sprout flanked by seedlike concave dots or disks, apparently yet another way of alluding to the triadic sign of a rulership supported by claims to extraordinary powers of fertility and growth. The undulating or scalloped contours of the flanges are drilled appropriately for secure attachment rather than simple suspension, like the Chacsinkin piece.

When these flanged jade carvings are seen against the wider spectrum of comparable Middle Formative imagery, they seem to fit more easily within the category of ruler portraits and their headband jewels (and flanged counterparts). These apparently served to evoke the celestial and terrestrial dimensions of the ruler's awesome claims to fertility. These claims were manifest in the imagery of personified clouds of jade.

Two "Spoons" (Pls. 25, 26, and see pl. 28)

"Spoon," or *cuchara*, is the name usually given to these smallish articles of jade, because they usually have a concavity on the part of the form that protrudes from the horizontal (pl. 26). Some examples (pl. 25), however, appear never to have had a useful concavity, and so the function implied by the name "spoon" may have been more metaphorical than literal. This should not be surprising, of course, given the pervasive visual equivalent of wordplay in Middle Formative jade.

Fewer than a dozen spoons of apparent Olmec origin have been reported from Costa Rica, but many more are known from Guerrero, as well as La Venta and various undocumented contexts in eastern Mesoamerica—along the Gulf Coast and in Yucatán. One of the spoons exhibited here (pl. 26) was at one point in its travels incised with a Maya text on the reverse, the side without the concavity. This may be a unique instance, or at least a rare one, since there do not seem to be any other published examples of Middle Formative spoons with Maya texts. Plate 25, on the other hand, was designed from the outset as a figured spoon, marked by the flame eyebrows of the Olmec celestial dragon and perhaps the recurved beak of a raptor such as the harpy eagle. The combination of the (probably) serpentine flame eyebrows and the raptorial beak is typical of the Olmec celestial dragon.

Some writers have suggested that these putative spoons were actually used as receptacles for the ingestion of a hallucinogenic snuff. This theory is based on a supposed connection between avian imagery and shamanic trance and flight. They may also have been receptacles for blood offerings. There is no archaeological or iconographic evidence to support the first suggestion, though it is ingenious, and there is no reason to limit the meaning of such impressive objects of lapidary art to such specific uses. As for the second possibility, blood offerings or allusions to them appear to have accompanied most rituals surrounding the recognition and validation of rulership in many Mesoamerican societies. The possibility that spoons might have been used in blood offerings may not be terribly significant, or iconographically registered. As for a possible zoomorphic form for the so-called spoons, Anatole Pohorilenko has suggested that the basic form





Fig. 32. Drawing of the Middle Formative Period (900–400 B.C.) Olmec altar known as the Shook Panel, which was found near San Antonio Suchitepequez, Guatemala. Diam. of altar: 81 cm (31⅞ in.). (From Shook and Heizer 1976: 5, fig. 2). Courtesy, UCLA Institute of Archaeology

Plate 25. Reworked Olmec spoon reportedly from Línea Vieja area, Limón Province, drilled to hang vertically. *Checklist no. 63*



Plate 26. Front of Olmec spoon from Guanacaste Province, with Maya glyphs (also see pl. 28). *Checklist no. 65*

reproduces that of a tadpole, and thus its referents would include the watery realm that surrounds, pervades, and underlies the earth, evoking imagery of natural fecundity and reproduction associated with water.[17] This may be an appropriate reading of the basic form of some spoons, but perhaps not all.

The pictorial evidence suggests that spoons were part of the regalia of rulers. This connection was perhaps especially important in those regions of southern and western Mesoamerica where Middle Formative rulers received badges of legitimacy from actual Olmec allies or trading partners. There is one monument that clearly depicts one way such an artifact was used. The so-called Shook Panel is a carved stone pedestal or altar from near San Antonio Suchitepequez, Guatemala; it was first published by the archaeologist Edwin Shook (fig. 32).[18] On it a ruler, certified as such by the proto–Jester God headband jewel he wears, also wears a spoon as a pectoral. It exactly matches plate 26 in form, and numerous others, although not those that represent the Olmec celestial dragon, such as plate 25. In fact, the Middle Formative orientation of plate 26, before it received its Maya text (which was put on the original reverse of the object), would have placed the dependent concavity to the figure's right, exactly as it is represented on the Shook monument.

As regalia of rulership, accompanying such orthodox emblems as the Jester God headband jewel, jade spoons may have been especially targeted for the margins of the Olmec oikumene. Spoons evoke much the same range of cosmic allusions as other, more Gulf Coast–centered regalia, such as the celestial dragon and its terrestrial counterpart. This would be especially true if the tadpole form is an iconic element. It is perhaps these more generalized and metaphorical cosmic associations that were intended by the K'iche' Maya of highland Guatemala in referring to the Big and Little Dipper constellations as *paq'ab* (ladle or spoon).[19]

Jade Clamshell (Pl. 27)

This jade icon of half a bivalve shell with a delicate low-relief image in its concavity is now perhaps the most famous object of jade from Costa Rica and by far the most important piece ever documented archaeologically. It was found during an archaeological rescue operation in 1977



Plate 27. Olmec shell-form pendant (detail) from the Principal Tomb, Talamanca de Tibás site, San José Province. *Checklist no. 64*

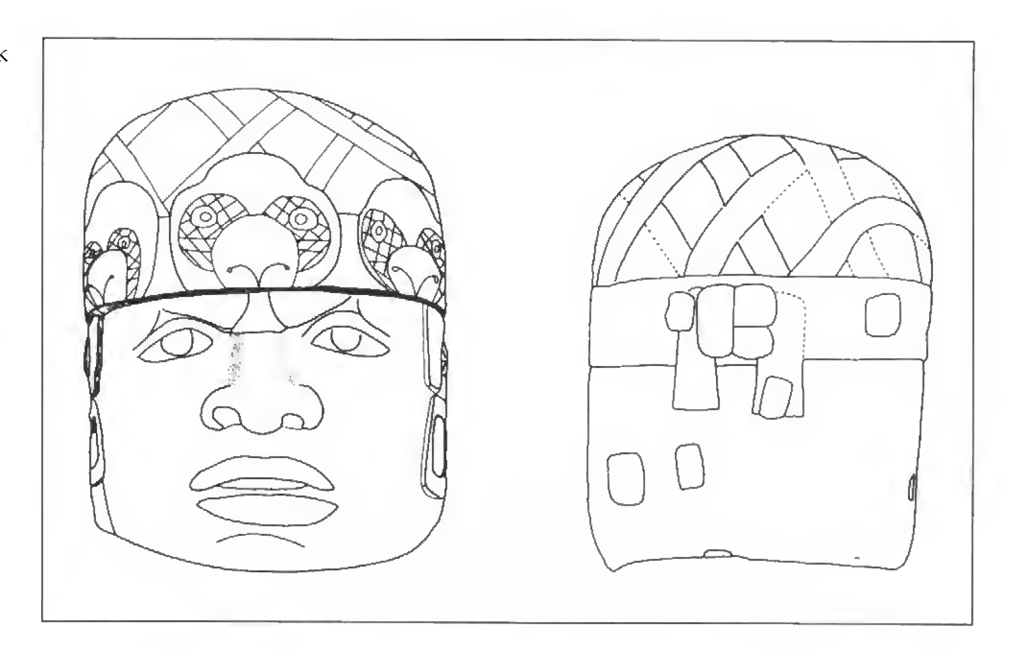


Fig. 33. Drawing of the front and back of the Early Formative Period (1500–900 B.C.) Colossal Head No. 2 from San Lorenzo site, Veracruz, Mexico. H. of head: 269 cm (106 in.). (From Clewlow 1967: 134, fig. 17). Courtesy, University of California Archaeological Research Facility, Berkeley

at Talamanca de Tibás in the suburbs of San José, the capital of Costa Rica. The first substantial account of the find was given by Michael J. Snarskis,[20] and the most extensive discussions of the Tibás jade shell are by Lee Parsons and David Mora Marín.[21]

Jade skeuomorphs of bivalve shells are documented archaeologically from La Venta and Cerro de las Mesas in Veracruz and, less formally, from Chacsinkin, Yucatán.[22] There are also many undocumented finds in western and southern Mesoamerica. Jade bivalve shells with images incised or rendered in relief in the concavity are not known from La Venta, but the numerous undocumented pieces probably belong also to the Middle Formative period. Of these, the Tibás shell is by far the largest and most complex. Again, there is the conundrum of truly exotic Mesoamerican artifacts turning up in Costa Rica, uniquely in this case, with a secure archaeological context.

The low-relief scene within the Tibás shell is unique to date in Mesoamerican art. It depicts a human right hand, wrist-bound and grasping a being that, most scholars agree, is a conflated zoomorph with the head and forepaws of a feline and the segmented thorax of an insect. The wings are apparently folded over the dorsal surface and grasped by the human hand. The sharp claws of the feline perhaps resemble some paw-wing–related designs on Early Formative ceramic vessels. The only directly comparable element of this strange icon is the elaborate and crisply rendered wrist knot, apparently a carefully tied and knotted ribbon made of cotton or some other fabric. Parsons, in the most detailed consideration of this piece, compares the knot to the tied headbands shown on two colossal heads from the Olmec site of San Lorenzo, Monuments 1 and 2 (fig. 33), and rejects the comparison to wrist knots on Kaminaljuyú Stela 11 made by Snarskis.[23] Kaminaljuyú Stela 11 is a Late Formative portrait of a ruler in the Maya Highlands at a time when rules for the representations of rulers were still being codified. A comparison of the knots from these monuments probably should be decided in favor of the Kaminaljuyú monument (fig. 34). First, the Kaminaljuyú context is more appropriate, comparing wrist knots rather than headbands. Second, there do not appear to be any comparable Middle Formative depictions of figures with wrist knots, whereas during the Late Formative and Classic periods the depiction of wrist knots becomes common, and their contexts are explicable. Wrist knots are frequently shown in the context of sacrificial bloodletting, the knots representing or symbolizing the cloth that will be splattered with blood and then burned as an offering. Knots alone come to evoke the ruler's rites of bloodletting in Maya civilization.[24]

If the strange composite feline-insect still eludes a



Fig. 34. Detail of Stela 11 from Kaminaljuyú, Guatemala. Late Formative Period (400 B.C.–A.D. 100). H. of stela: 198 cm (78 in.). Museo Nacional de Arqueología e Etnología, Guatemala



Fig. 35. Late Formative Period (400 B.C.–A.D. 100) shell-form ornament from Kendal, Belize. Jade, H. 11.8 cm (4⅝ in.). Merseyside County Museums, Liverpool

persuasive identification and interpretation, other dimensions of this piece may not. The shell form itself, transformed into jade, evokes the watery realm that surrounds and underlies the earth. The bivalve species, according to Snarskis, is a *tagelus* from the Pacific Coast.[25] In Mesoamerica generally, shells are symbolic of fertility and authority.[26] It is also possible that actual bivalve shells were sharpened and used as knives during bloodletting rituals (as opposed to the more frequently discussed piercing mode), in which case the jade shell icons would also evoke the blood offerings that were believed to secure fertility and regeneration. In the Early Classic period, Maya kings attired as the god Chac-Xib-Chac, or as GI of the Palenque Triad, wore a shell as part of their ear ornaments. One such jade bivalve-shell ear ornament, from Kendal, Belize (fig. 35), may have been part of a deity-impersonator set belonging to a Late Formative king. Given the proclivity of the Late Formative Maya for appropriating the regalia and icons of the Middle Formative Olmec, it would not be surprising if Olmec jade bivalve shells were actually integrated into their evolving set of regalia. Thus, upon consideration of wider contexts of jade bivalve shells during the Middle Formative and Late Formative periods, the Tibás shell emerges just a bit from its obscurity. Rather than being a Middle Formative Olmec icon, the Tibás shell is more likely to be at least Late Formative or Protoclassic, and from the southern marches of Mesoamerica rather than the Gulf Coast. It seems most unlikely that the Tibás shell was reworked at all in Costa Rica. The figural scene is low-relief and was thus reserved as the shell was carved; it could not have been added later.

MAYA JADE IN COSTA RICA

Maya jades in Costa Rica are as rare as Olmec ones, and none of the Maya jades presently known seems to be later than the Early Classic period. A few of the so-called bib-head pendants of the Late Formative period may be from the southern edge of Mesoamerica. A blue-green bib-head with goggle-eyes in Denver is nearly identical to one from Salitrón Viejo, Honduras.[27] While the Olmec objects found in Costa Rica display some variation in formal category, the majority of the Maya jades from Costa Rica

belong to a very rare category of artifacts, the belt celts or plaques that were typically worn in threes from the waist and over the loins of the Maya king. This location on the king's body is explained in part by the common homophony in Maya languages of *tun* (jade), and *ton* (scrotum, testicles). The triadic arrangement is an obvious metaphor, in blades of precious jade, for the royal genitalia, frequently the locus of blood sacrifice and the font of reproduction and regeneration. One of the earliest representations of such a belt celt is a piece in Dumbarton Oaks that depicts such blades being worn (fig. 36). And, like all the belt celts found in Costa Rica, the Dumbarton Oaks example has been dismembered and redrilled. The three existing holes were drilled after the initial incising of image and text and after the celt was, so to speak, decapitated. A new hole was drilled for vertical suspension, as it would have been originally, and two lateral holes were made for horizontal suspension. The two dismembered celts in this exhibition were first published by Carlos Balser, a longtime collector and scholar of Costa Rican art, whose collection formed the nucleus of the Museo del Jade in San José. Balser's reported find-spot was Bagaces, in Guanacaste Province, where many of the Olmec spoons are also reported to have been found.[28]



Fig. 36. Front of a reworked Maya belt celt of the portrait type. Proto- or Early Classic Period (100 B.C.–A.D. 400). Jade, H. 11.7 cm (4⅝ in.). Dumbarton Oaks Research Library and Collection, Washington, D.C. (B-586)

Spoon with Maya Text (Pl. 28 and see pl. 26)

Perhaps the earliest sign of Maya presence in jade in Costa Rica is the text incised on the reverse of the Olmec spoon (pl. 28). It consists of a single row of eight glyphs, beginning near the pointed tip and extending most of the length of the spoon. In the convention for citing Maya glyphs, vertical columns are lettered, starting with A, and rows are numbered, starting with 1. In this coordinate system, the first glyph on the spoon is A1 and the last is A8.

David Mora Marín noted the similarity of the Maya text's graphic style to that of the Maya text incised on the reverse of the Dumbarton Oaks pectoral seen in figure 28.[29] The incised Maya image that accompanies the text of this pectoral has been related to Late Formative monuments of the Izapan tradition, in southern Mexico and adjacent coastal and highland Guatemala.[30] This suggests that the image and text of the pectoral and the text of the



Plate 28. Back of Olmec spoon (see pl. 26) from Guanacaste Province, showing Maya glyphs. *Checklist no. 65*

spoon might date to the first century A.D. An amended summary of Mora's reading of the spoon's text is as follows:

A1: verb or possessive, partially effaced and not legible
A2: personal name or title, unread
A3: CHUL AKBAL AHAW, Emblem Glyph, designating the person of A2 as "Holy Dark or Night Place Lord"
A4: U, possessive, "his or its"
A5: NAL, place
A6: unread
A7: unread
A8: CHUL AKBAL AHAW

Although substantial parts remain unread or unclear, enough is understood to know that the object was appropriated by a Maya ruler of the Late Formative period (100 B.C.–A.D. 100), and that the Olmec spoon, newly inscribed, entered the regalia set of the ruler. Two nominal phrases are ended by the name of the ruler and the name of his lineage, site, or realm, "Dark Place" or "Night Place." This lord's site apparently never acquired a more orthodox Emblem Glyph during the Classic period, or perhaps his successors lost their independence and their right to an Emblem Glyph. Alternately, the reference may be to a mythical place, not an actual one.

Dismembered Belt Celt (Pl. 29)

The right half is all that remains of an Early Classic Maya belt celt (pl. 29). The celt has been split evenly down the vertical axis and redrilled at the top so that the fragment would hang straight. Part of the original drill hole remains near the headdress of the sliced figure. The glyphic text on the reverse was effaced, presumably during the dismembering. This belt-celt fragment is very like the famous Leiden Celt, perhaps the best known of the category, which probably belonged to a ruler of Tikal, or a dependency, in the early fourth century A.D. (fig. 37). Although none of the king's face or head remains in plate 29, the rear portion of his headdress displays elaborate ear ornaments and knots, and in the crook of his left arm he dis-



Plate 29. Recut Maya belt celt reportedly from Bagaces vicinity, Guanacaste Province. *Checklist no. 66*



Fig. 37. Front of Maya belt celt of the portrait type known as the Leiden Plaque. Early Classic Period (A.D. 320). Jade, H. 21.7 cm (8½ in.). Rijksmuseum voor Volkenkunde, Leiden



Plate 30. Recut Maya belt celt reportedly from Bagaces vicinity, Guanacaste Province. *Checklist no. 67*

plays a deity head. His belt is marked with disks and crossed-band sky signs, and there is a comparable pendant motif crossing the king's left thigh. In both the Leiden Celt and plate 29 the king's skirt is fringed and has elaborate knots below the knee. The rest of the celt in plate 29 is abraded, but if the pointed contour is the original, there may not have been enough room at the bottom for a captive like that depicted at the feet of the Leiden Celt king.

Dismembered Belt Celt (Pl. 30)

Another Early Classic Maya belt celt also survives as a fragment (pl. 30)—apparently the top third or so. The obverse, or image side, has been effaced, and the reverse retains only an ovoid cartouche with two glyphs. The cut across the horizontal axis is not quite on the axis; two additional holes were drilled above the (presumed) original suspension hole, transforming the group of three holes into a schematic Ahau, or lord sign, but without the enclosing rounded frame. Mora's reading is:

A1: U CHAM Y AKIL, "his harvest, his tongue," apparently referring to the sacrifice of blood from the tongue, perhaps in the manner shown in Lintels 24 and 17 from Yaxchilan, Chiapas.[31]

A2: HOK I TI AHAWLEL, "he ascended to the kingship."

The short text thus states that an unnamed king let blood from his tongue and took office as king. In other words, the sacrifice of his blood preceded and sanctified his assumption of power.

Bead with Skull Glyph (Pl. 31)

This oblong jade bead was reportedly found in the Línea Vieja region of the Atlantic Watershed; within its corrugated contour is an incised skull with a large hole in the center and two small biconical holes above it. The incising is very light, and an undetermined amount has been effaced so that little is clearly legible today. The central image is a left-facing skull (or downward facing, if the two biconical holes were used for suspension). It is presum-



Plate 31. Ornament with Maya glyph reportedly from Línea Vieja area, Limón Province. *Checklist no. 68*



Fig. 38. Ornament in pl. 31, with the incision inpainted for greater contrast.

ably human; the large hole serves as the eye socket. Because of the seeming glyphic or glyphlike content, the bead has been assumed to be Classic Maya in origin, although one scholar questions these assumptions.[32]

The bead could also be a Maya artifact with glyphic elements, i.e. an isolated piece cut from a larger captioned scene, where one glyph has become the centerpiece. The bottom element resembles the so-called water group affix, read as *K'ul* (holy), and a standard part of emblem glyphs that name a ruler as the "holy lord," or *K'ul Ahaw,* of a site.[33]

If the incising does represent a glyph, the glyph has a skull as a main sign, with an affix on each side. As a single unpossessed or uninflected glyph, it might be a logograph for necklace or collar ornament, *uh*. It has been noted that such "name-tagging" is fairly common and that among jade objects from the Chichén Itzá Sacred Cenote, "all objects described as *uh* are drilled for suspension, probably as neck ornaments."[34]

The famous Popol Vuh, a historic creation text of the highland K'iche Maya that preserves much earlier Maya religious lore, provides a narrative context for a skull that may be relevant here.[35] Part of the postfix at the right of the skull appears to contain a well-known indicator for "tree," Maya *te* or *che*. An episode in the Popol Vuh recounts that two legendary twins are sacrificed by the Lords of the Underworld, and the head or skull of one of the twins, One Hunahpu, is placed in a tree. Once the head is in the tree, the tree magically produces calabashes. A little while later, the daughter of an Underworld Lord is magically impregnated when the skull spits in her hand; she gives birth to the Hero Twins, who vanquish the

Lords of the Underworld.[36] The skull of One Hunaphu is represented in Classic Maya painting on ceramic vessels.[37]

This enigmatic object is emblematic of the problem of explaining foreign jades in Costa Rica. It is always difficult to grasp artifacts out of archaeological context and doubly so when we are missing both the original Maya and later Costa Rican contexts.

* * *

Several patterns emerge in this brief look at jades of Olmec and Maya origin found in Costa Rica. With the notable exception of the Tibás jade shell, most of the known foreign jades in Costa Rica were reportedly found in Guanacaste Province, a region that has long been thought to have had ties, however attenuated, with southern Mesoamerica. A generally coastal route, from El Salvador to Guanacaste, may have been the most common ancient path. The foreign jades themselves also form a pattern. Without exception they are parts of the regalia of Mesoamerican rulers. In all likelihood, the Olmec jades arrived in Costa Rica along with the Maya jades, because the Maya had already possessed them, as with the spoon in plates 26 and 28, for example, which was appropriated by a Late Formative Maya king in the same fashion as the Dumbarton Oaks pectoral. There is little evidence to suggest that any of the Olmec jades arrived in Costa Rica during the Middle and Late Formative eras, nor that foreign jades simply "dribbled" haphazardly out of southern Mesoamerica and into Costa Rica. Rather, as John Hoopes has suggested, it is more likely that the explanation for the presence of jade is ultimately a political one. It may represent one aspect of the internal upheavals among the Maya at the end of the Early Classic period, such as the conflicts between Tikal and Uaxactun in the fourth century A.D. and Tikal and Caracol in the sixth century.[38] And Mora suggests that the alteration and dismemberment of the Maya regalia were carried out by the Maya themselves, as symbolic acts of effacement. But why the Maya would then have disposed of the effaced and dismembered regalia in this fashion is still a question, nor do we know how much of this history might have been known to the new recipients in Costa Rica. The archaeological context of the great Tibás jade shell, placed prominently by the right hand of the deceased, suggests that the elites of Costa Rica had some appreciation for the importance of these strange new treasures from afar.

Acknowledgments: I am grateful to David Mora Marín, State University of New York at Albany, for permission to cite his unpublished study of jades from Costa Rica with Maya texts, and to John Hoopes, University of Kansas, for introducing me to Mora's work. I am also grateful to Justin Kerr, Ruth Krochock, Matthew Looper, and Dorie Reents-Budet for their generosity.

1. Kirchhoff 1943.
2. See Willey 1988: ch.9. This is an invaluable collection of intellectual biographies of some American archaeologists, many of them Mayanists, by one of American archaeology's notable teachers and scholars.
3. See Andrews 1986b: vii–viii; and Williams 1986.
4. Hartman 1901, 1907; Rowe 1959; and Ohlsson de Formoso 1991.
5. Haberland 1959; Coe and Baudez 1961; Coe 1962.
6. Coe and Diehl 1980: 232–59.
7. On Olmec and Early and Middle Formative problems generally, consult the excellent catalogues of two recent exhibitions, at the Princeton University Art Museum, *Olmec World* 1995, and at the National Gallery of Art, *Olmec Art of Ancient Mexico* 1996. The essays and references in these two volumes will introduce the new reader to the extensive literature on early Mesoamerican art and archaeology.
8. The best introductions are Coe 1965 and Joralemon 1971, and more recently *Olmec World* 1995 and *Olmec Art of Ancient Mexico* 1996.
9. Grove 1996.
10. On the geology and archaeology of Mesoamerican and Costa Rican jade, see the essays in Lange 1993b.
11. See Thouvenot 1982 for the Aztec, and Tozzer 1941 for the Maya.
12. Coe 1968: 103.
13. Coe and Diehl 1980: 159–87.
14. Reilly 1995.
15. Fields 1991; Taube 1995.
16. Freidel 1995: 6–7.
17. Pohorilenko 1981: 311.
18. Shook and Heizer 1976.
19. B. Tedlock 1992: 29.
20. Snarskis 1979.
21. Parsons 1993; Mora Marín n.d.
22. Andrews 1986a.
23. Snarskis 1979: 99.
24. Schele and Miller 1986: 176.
25. Snarskis 1979: 98–99.
26. Miller and Taube 1993: 152–53.
27. Cf. Parsons 1993: fig. 19.3; Hirth and Hirth 1993: fig. 13.5, top left.
28. Balser 1974: 20–21, pl. 8.
29. Mora Marín n.d.
30. Coe 1966; also Schele and Miller 1986: pl. 32.
31. Schele and Miller 1986: pls. 62, 64.

32. Dorie Reents-Budet, personal communication, 1998.
33. Ruth Krochock and Matthew Looper, personal communication, 1998.
34. Stuart and Houston 1994: 46.
35. Justin Kerr, personal communication, 1998.
36. D. Tedlock 1996: 36.
37. For Late Classic painted vessels see Kerr 1989: no. 1183; Reents-Budet 1994: no. 88 and figs. 1.10, 6.49; Coe 1982: no. 48.
38. Garber et al. 1993.



3. THE IMAGERY AND SYMBOLISM OF PRECOLUMBIAN JADE IN COSTA RICA

MICHAEL J. SNARSKIS

Any symbolic analysis of Precolumbian jade in Costa Rica is hindered by two vexing problems: uncertain provenance and mortuary contexts, and the absence of any hieroglyphic record or texts that speak to the importance of jade and visually similar stones in the archaeological cultures that used them. To avoid a purely subjective interpretation of artifact shapes and carved or incised motifs, many archaeologists and art historians have sought to use the relatively better-known and accessible iconography of several cultural traditions in Mesoamerica, where the socio-religious importance of jade continued into the fifteenth and sixteenth centuries. Thus, some of the first Spanish arrivals were told of the sacred, precious nature of jade literally by those who used it, the keepers of its tradition. This did not happen in Costa Rica, where lapidary work in jade or similar green-colored stones was already waning by A.D. 500 and had virtually disappeared by A.D. 700.

The lack of explanatory writings employed by Costa Rican jade-using cultures themselves and of information filtered through historical accounts does not, however, prevent us from extrapolating meaning from Mesoamerican cultures to those of Costa Rica, nor from using other methods of iconographic analysis favored by art historians.[1] Valuable insights into the significance of jade in Mesoamerica have also been drawn from the notes of the Spanish chroniclers. The large size of the Precolumbian lapidary corpus in Costa Rica is striking when the area encompassing eastern Honduras and all of Nicaragua, which separates Costa Rica from southernmost Mesoamerica, is considered. As yet it is virtually devoid of jade artifacts throughout the whole of its archaeological sequence.

This puzzling gap in the geographic distribution of Precolumbian carved jade in Central America is echoed by apparent anomalies in the chronology—time gaps—illustrated by the similarities between the lapidary corpus of the Olmec culture, the seminal civilization of Mesoamerica, and that of Costa Rica. These include the preferred use of deep blue-green diopside jadeite, the predominance of sculpturally dynamic, three-dimensional carving, and the ubiquity of the polished axe or celt form. Olmec jade-carving began as early as 1000–900 B.C. and reached its apogee in sites such as La Venta in the Mexican state of Tabasco about 700–500 B.C., while the great majority of Costa Rican carved jade and jadelike pendants seem to fall within the period from a few centuries before the time of Christ until A.D. 500–700. So, in spite of similarities in raw material and style, the Olmec and Costa Rican lapidary complexes were not contemporary. Although the original reverence for jade as a symbolic, high-status material apparently began with Early Formative (1500–900 B.C.) non-Olmec societies in the Valley of Mexico, Oaxaca, and Honduras,[2] the "formal and iconographic traditions of figure-decorated jade" and other ritual paraphernalia began in the New World with the Olmec, their allies, and trading partners.[3] It continued as an integral part of the Maya culture from the Late Formative (100 B.C.–A.D. 250) through the Postclassic (900–1500 A.D.), and flourished for some centuries before

Plate 32. Figure-celt pendant with large headdress from Guanacaste Province. *Checklist no. 31*

and after Christ in most of Costa Rica. Its last ripples of diffusion were felt in some late Precolumbian cultures of northern South America, such as the Tairona, in the form of horizontal, stylized winged pendants and occasional "axe-gods" incorporating the celt form, both usually made from stones other than jade. Jade carving was not a facet of the high cultures of Andean South America.

Jade and Its Meaning

The word "jade" is used as an umbrella term for a wide range of hard greenstones, the carving and polishing of which required great skill in many cultures around the world (especially in Asia and the Americas) for at least the last four millennia. Mesoamerican and Central American lapidary craftsmen knew of the variety of greenstones, and the hard, tough, translucent stones were very rare and thus more treasured. The artisans were probably not consistently able visually to distinguish true geological jade (jadeite),[4] although it is possible that this distinction ultimately did not matter. The form or symbolic representation into which a greenish stone was carved was probably more important than the specific material itself,[5] but there seems to be little doubt that the Precolumbian peoples of Mesoamerica reserved the finest, most translucent emerald green or deep blue-green materials for the most ornate, complex symbolic carvings, usually found in high-status tombs or other elite contexts. This pattern is also observed in prehistoric Costa Rica, albeit to a lesser degree, where most lapidary work was carried out with greenish blue or green-brown stones that were not geological jade.

The green color of jade was itself a potent symbol in those Precolumbian cultures of Mesoamerica that encountered the Spanish interlopers in the sixteenth century. The Aztecs of central Mexico, who first met the Spaniards in the early 1500s and told them of their immense reverence for this most sacred, most precious of all materials, considered jade far more valuable than gold. They used several different words to differentiate the various colors and textures of jade and jadelike stones. According to the sixteenth-century chronicler Fray Bernardino de Sahagún, the most common term was *chalchihuitl*, which he described as opaque and light green in color mixed with white. The Aztecs named another stone *quetzalchalchihuitl*, after the iridescent, emerald green plumage of the quetzal bird of the Maya highlands. Sahagún noted this green as deeper, translucent, and unspotted. The very best examples of this jade, flawless and highly polished, were called *quetzalitzli*, or "quetzal-colored obsidian," by the Aztec. Sahagún called them "emerald."[6] This highly valued emerald jade frequently appears in smaller patches or veins in a differently colored matrix, and even then it was prized out and used to make tiny spangles, beads, and plaques.[7] It is not often found in the Precolumbian jades of Costa Rica.

For other Mesoamerican peoples, such as the Maya, jade represented water and the young, growing maize plant, both things vital to life. Green vegetation reflected in still water offered a deep, cool vision paralleled by the lustrous surface of a translucent polished jade. "The hieroglyph for jade was used as a day name in the Maya sacred calendar, where it stood for rain. . . . Rain was essential for the maize crop, and water in streams and reservoirs insured the survival of the Maya communities in the long dry season from January through May."[8] It is likely that jade in Precolumbian Costa Rica had symbolic associations similar to those found in these Mesoamerican cultures to the north: water, young maize plants, seeds, fertility, things related to agriculture, and elite or ruling-class status. It would probably not be going too far to say that jade symbolized the "basic vital force" responsible for the sustenance and survival of the cultures that revered it.

The Olmec–Costa Rica Enigma

Here, the term *Olmec* will refer to a distinctive art style recognized in several parts of Mesoamerica during the Middle Formative period (900–400 B.C.), not necessarily the civilization that created several large architectural sites in the Mexican Gulf Coast region. What mechanism brought Olmec jades to Costa Rica but not to the intervening areas? Why do many Olmec and Costa Rican jades share a blue-green color, and why is there a chronological discrepancy of at least five centuries between the two groups? These are questions that archaeologists have debated for more than fifty years. Further, why do those Olmec jades found in Costa Rica seem to be mostly atyp-

ical, with forms and symbols not prominent in the Classic Olmec lapidary corpus? Why are the majority reworked to a greater or lesser degree? An obvious answer is the several-century time difference between terminal Olmec culture and the jade-revering cultures of Costa Rica. This is nicely illustrated by an Olmec jade spoon (see chap. 2, pls. 26, 28) incised with considerably later Maya glyphs. The Costa Rican archaeologist David Mora Marín of the State University of New York at Albany has offered a fascinating hypothesis, based on his study of Maya glyphic inscriptions, that Olmec jades were looted by certain Maya peoples, who then could rework and trade them at will.[9] If this were to be true, it would go a long way toward explaining what we observe in the foreign jades found in Costa Rica.



Fig. 39. Figure-form ceremonial mace head from Guanacaste Province. *Checklist no. 55*

A Costa Rican Mortuary Complex

In northwest, central, and eastern Costa Rica from 300–200 B.C. until A.D. 500–700, jade pendants were used as mortuary offerings frequently associated with carved metates of porous volcanic rock such as andesite and basalt. Somewhat less frequently these were found with perforated mace heads or banner stones sculpted into avian, feline, or anthropomorphic effigies. These three artifact types symbolize, or actually have to do with, different aspects of agriculture. The Costa Rican jade pendants found in these circumstances are often in the form of "axe-gods," in which an effigy carving of an animal, a human being, or a combination thereof, surmounts a smooth blade in the form of a polished axe or celt. This celt aspect of the jade pendants is nonfunctional, but real polished axes were wood-splitting and tree-felling tools in use since Neolithic (Archaic) times all over the world. Trees were felled to clear land for agriculture. In the Olmec cultural tradition, jade celts and avian effigies, which are precisely the elements combined in the majority of Costa Rican axe-god jade pendants, were linked symbolically to maize.[10] The so-called mace heads (figs. 39, 40) were almost certainly not weapons, but rather badges of office, status, or clan-type affiliation and like the jade pendants were purely symbolic, not functional. Most are too small and light to inflict serious damage. Although the symbolic mace heads were made of a wide



Fig. 40. Owl-head ceremonial mace head from Guanacaste Province. *Checklist no. 57*



Fig. 41. Ceremonial metate from Guanacaste Province. *Checklist no. 59*



Fig. 42. Underside of ceremonial metate in figure 41.

range of rocks, some almost claylike, the majority have a white to light greenish color and a compressed, polished surface that erodes to reveal the rough texture and veins of a quartzitelike rock beneath.

The metates, virtually all of which have some grinding wear, were for grinding maize and other foodstuffs. This was the last stage in the agricultural cycle before redistribution of food, one of the sources of elite power. In the centuries when jade was the most important symbolic material, special, ornately sculpted metates became the principal sculptural vehicle through which the deities linked to agriculture were portrayed. Curved-plate volcanic-stone metates with three almost cylindrical legs (figs. 41, 42) were made in Greater Nicoya in the Zoned Bichrome period (ca. 300 B.C.–A.D. 300) and are frequently associated with jades in burials. They usually have little decoration on the upper surface, and their thinness and the unusual position of the symbolic carved decoration on the bottom of the plate suggest only occasional or ritual use.

These symbolic carvings may indicate that whoever used the metate, or in whatever ritual it was used, they were supported by or associated with the being depicted. These depictions are both zoomorphic and masked humans in full regalia. The ubiquitous guilloche mat pattern (figs. 41, 42 and see introduction, pls. 2, 3) or variants thereof, has the usual associations with elite and/or authority figures. The ends of the legs resemble maize ears in these examples. This one (figs. 41, 42) has a leg with an avian effigy head in relief, which is a continuation of the motif on the plate bottom. While these artifacts may have been used on occasion as seats or "thrones," the metate shape and grinding wear are unmistakable, and it is likely that their principal use was in rituals for the propitiation of agricultural deities or the processing of ceremonial foodstuffs.

The three tripod metates—two circular and one rectangular (see chap. 1, fig. 15)—which formed the funeral bier of the principal burial at the Tibás site, are typical of the first several centuries A.D. in the Central Highlands and Atlantic Watershed regions of Costa Rica. The notched edges symbolize stylized human heads, a reminder of the human sacrifice thought to accompany

agriculture-related rituals.[11] There is strong evidence that the agricultural deities were propitiated by human sacrifice; many elaborate ritual metates of this period display severed human heads prominently. The severed human head may have represented a seed that augured the success of the next maize crop.

Costa Rican Axe-Gods

One of the most typical forms of Precolumbian Costa Rican lapidary work is the so-called axe-god, in which an animal, a human being, or a composite effigy surmounts a celtlike polished blade. They are drilled transversely for suspension. Functional or working polished celts (figs. 43, 44) were wood-splitting and forest-clearing tools usually associated with sedentary, agricultural societies. The Costa Rican axe-god jades were not made from working celts, but rather purposely shaped to resemble them; it must be understood that the axe-gods were high-status symbolic jewelry, not knives or tools. Jade itself symbolizes maize, water, fertility, and sanctified high status (both political and religious). The form of the polished axe is associated with clearing land for agriculture, so those who possessed the best examples probably had to do with the propitiation of agricultural/fertility deities, land use, planting, harvesting, and the distribution of foodstuffs.

There is still disagreement on the role of the Olmec jade-carving tradition vis-à-vis that of Costa Rica, some specialists seeing no connection,[12] while others maintain that whatever connections or stylistic influence may have existed did not really matter: "the [Costa Rican] prehistoric lapidary tradition is considered to have been primarily an indigenous development in northern Costa Rica, and is characterized as the Costa Rican stone-carving tradition."[13] Yet others postulate stylistic and iconographic linkages as in the "interrelationships [that] were too widespread for the tradition of jadeworking to have arisen in Costa Rica independent of northern influence. Lacking Maya elements, it can only have come from an earlier source: directly or indirectly from the Olmec."[14] A selection of Olmec "votive axes," thought to have influenced the later Costa Rican jade axe-god pendant tradition, has been proposed for some years.[15]

A recent iconographic study has stated that "the florescence of the jade axe [axe-god] tradition in Costa Rica represents a transformation of the earlier Olmec tradition of carving rather large axes that were monuments, more like miniature stelae than ornaments, employed as funerary offerings and perhaps as political gifts. The infantile supernatural being whose face or body appears on many Olmec axes is, among other things, an expression of fertility and probably the guardian of rulers."[16] In the Olmec axes, the upper figurative portion is usually wider and thicker than the blade (fig. 45), while in Costa Rican axe-gods the upper portion and the blade tend to be of simi-



Fig. 43. Working celt from Las Huacas site, Guanacaste Province. *Checklist no. 2*



Fig. 44. Working celt from Las Huacas site, Guanacaste Province. *Checklist no. 3*

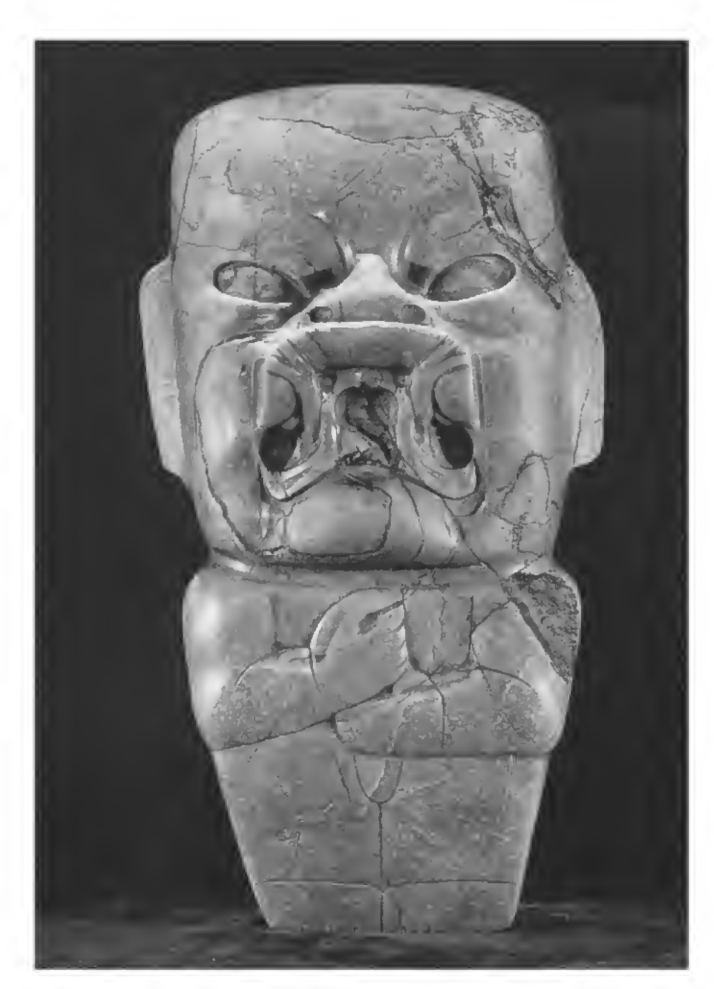


Fig.45. Olmec ceremonial axe known as the Kunz Axe, reportedly found in Oaxaca, Mexico. Jade, H. 30 cm (11¹³⁄₁₆ in.). American Museum of Natural History, New York (30/7552)

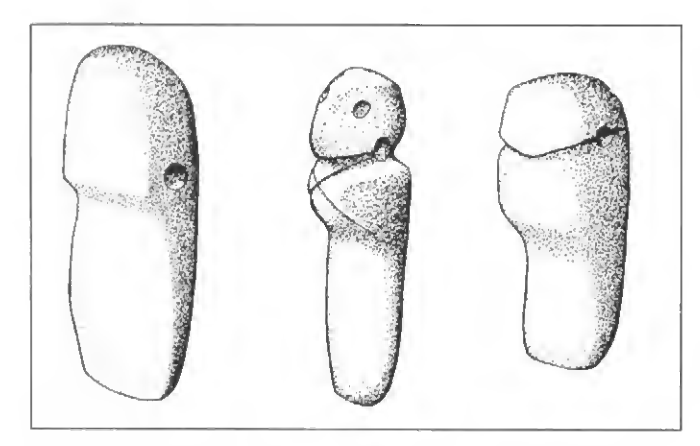


Fig.46. Miniature pendants from Burials 2 and 7 at Playa de los Muertos, Ulua Valley, Honduras. Jade, H. 3–3.5 cm (1⅛–1⅜ in.). (From Easby 1968: 85, fig. 62). Courtesy André Emmerich Inc., New York

lar width or the blade is wider. The earliest axe-gods (Middle Formative, ca. 900 B.C.) are the tiny (3–3.5 cm), crude examples from Playa de Los Muertos, Honduras (fig. 46).[17]

Avian Axe-God Pendants (Pls. 33–41)

Common in the Costa Rican lapidary corpus are axe-gods with what at first glance appear to be avian effigies. They are in fact part of a zoo-anthropomorphic continuum, with many jades having relative degrees of "birdness" and "humanness." Many show human beings masked as birds, for which there is an Olmec precedent: the "Bird Monster," linked to the heavens (sky), maize, and agricultural fertility, and the spiritual ecstasy produced by ingestion of psychotropic substances.[18] In the Atlantic Watershed, jades are sometimes associated in burials with ceramic double-tubed nasal snuffers or pipes that may have been used to ingest such substances.[19]

A group of axe-gods seem to show purely avian effigies (pl. 33 and see checklist 25), including the earliest yet radiocarbon-dated pendant from the Nicoya Peninsula (see chap. 1, fig. 11). A large example of the type (see chap. 1, pl. 11) was found in the same burial as the Tibás Olmec jade clamshell.[20] This axe-god was perhaps an import into the Central Highlands from Greater Nicoya, as was the bridge-and-spout monkey effigy vessel (see chap. 1, pl. 18). The Tibás jade avian axe-god is one of the most beautiful of its kind. Close examination reveals two pairs of drilled eyes looking out, and it may be a masked person after all. The harpy eagle (*Harpia harpyja*) is probably the bird portrayed on most of these jades. It is a reclusive dweller in the high forest canopy and presents a striking image when glimpsed with its facial disk (feathers forming circles around the eyes) and two high tufts of feathers like horns.[21]

Half men–half birds, or men costumed and masked as eagles, are shown in another group of pendants (pls. 34, 35). It is uncertain whether they represent a composite deity, analogous to the part jaguar–part man of the Olmec, or whether the transformation process itself was key in the belief system of the Costa Rican jade-working polities. The avian features probably signified the alter-ego of the shaman or other powerful personage portrayed



Plate 33. Bird-celt pendant from Guanacaste Province. *Checklist no. 26*



Plate 34. Bird-celt pendant with tall headdress from Guanacaste Province. *Checklist no. 27*



Plate 35. Bird-celt pendant with tall headdress from Guanacaste Province. *Checklist no. 28*

on the jades. The figures have exceptionally tall headdresses, as do those with tiered headpieces topped by a seated bird (pl. 36 and see pl. 32). The high crest of one (pl. 37) has a nonrealistic trait in the form of a frontal box with crossed lines. Design elements emphasizing the four corners of a square often had cosmographic significance, because the four cardinal points were symbolically important, especially in Mesoamerica and in Costa Rica during the time jade carving was practiced.

An interesting avian pendant is a reworked Olmec piece (pl. 38) that is similar to those known from caches of jades unearthed in Mexico at Cerro de las Mesas, Veracruz,[22] and Chacsinkin, Yucatán.[23] The three jades have similar crests, beaks, and incised eyeforms, and all have two transverse perforations for multiple strings of beads. The details of the head are atypical for Costa Rican avian pendants, but the blade of the one shown in plate 38 is uniquely carved with the low-relief opposing triangles



Plate 36. Figure-celt pendant with large headdress from Guanacaste Province. *Checklist no. 32*



Plate 37. Bird-celt pendant with large headdress from Guanacaste Province. *Checklist no. 30*



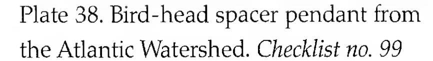


Plate 38. Bird-head spacer pendant from the Atlantic Watershed. *Checklist no. 99*



Plate 39. Bird-celt pendant from Las Mercedes site, Línea Vieja, Limón Province. *Checklist no. 98*



Plate 40. Bird-celt pendant from Guanacaste Province. *Checklist no. 29*

typical of many Costa Rican artifacts, where such triangles are usually interpreted as crocodile motifs. The lower blade ends in a blunt knob as if it had been broken or cut off. Although in a Late Formative context (100 B.C.–A.D. 250), the Cerro de las Mesas cache contained several typically Olmec artifacts, and its excavator thought the avian pendant with the two transverse perforations to be "unquestionably Olmec" also.[24] By extension this pendant (pl. 38) was originally Olmec, later modified in Costa Rica. In general, Costa Rican pendants with similar barlike projections and double or triple transverse perforations for multiple strings of beads are early.

Not all avian axe-gods portray the tufted harpy eagle. Another series, with a centerline crest of feathers on the head (pls. 39, 40), has been identified as the quetzal (*Pharomachrus mocinno*),[25] a shy, deep-forest bird whose emerald green plumes were highly valued and whose color was used to describe certain jades. One pendant (pl. 40) has human arms and ambiguous hands, while others, such as plate 39, have crisp, angular carving. The



Plate 41. Profile bird-head figure pendant from Guanacaste Province. *Checklist no. 36*

centerline crest of the quetzal is also prominent in thin pendants made from a celt form sliced longitudinally and oriented laterally (pl. 41 and see checklist 37, 38). Thus the quetzal is seen in profile instead of more three-dimensionally, as in the previous group. Because of their thinness, these profile pendants are visibly perforated.

One pendant (pl. 42), of another avian pendant type—the so-called beak-bird that will be discussed later—is so clean lined and stylized that its lines are almost modern. This flexibility of approach and what seems to be playfulness (although jade pendants were certainly not playthings in the cultures that produced them) are characteristic of much Costa Rican jade carving, with its double-aspect pendants (see pl. 44) and pendants with four or five different motifs (see pls. 71, 72).

Other Animal Effigies (Pls. 43–45)

Other axe-gods appear to show bat imagery (pls. 43, 44; and see chap. 4, pl. 89), probably human beings in bat costume. This is suggested by small ears (pls. 44, 89), thin, bent legs drawn up on the back (pl. 44), wide, toothless mouth (pl. 89), and flared blades (pls. 44, 89). The piglike



Plate 42. Profile bird pendant reportedly from Guanacaste Province. *Checklist no. 35*



Plate 43. Animal-celt pendant from Guanacaste Province. *Checklist no. 20*



Plate 44. Dual-aspect pendant from Guanacaste Province. *Checklist no. 21*



Plate 45. Profile animal-head figure pendant from Guanacaste Province. *Checklist no. 39*

snout of plate 43 is actually the mask of the common vampire bat (*Desmodus rotundus*) with its pushed-in face. Tiny crocodile heads adorn its headdress. Incised designs on the cheeks of plate 89 give the impression of feline whiskers, as does its whole snout area, but jaguar images usually show teeth or fangs. Its headdress resembles that seen on some monkey effigies (pl. 45).

Anthropomorphic Pendants (Pls. 46–55)

Numerous axe-god pendants portray human figures, and



Plate 46. Figure-celt pendant from Guanacaste Province.
Checklist no. 13



Plate 47. Figure-celt pendant from Guanacaste Province.
Checklist no. 14

formal, stiff poses characterize the group (pls. 46, 47; and see chap. 4, pl. 90). Faces are serene, if not severe or mask-like, and hands meet or cross over the midsection, ending the figural representation with the polished celtlike blade below. The pose is perhaps a ritual one—possibly shamanic. One of the pendants excavated in Burial VIIIa at Las Huacas in 1903 is of this type (see introduction, pl. 5). It is imposing, with a wide, square mouth and the simple, rounded coiffure or fezlike cap that is found on similar jades (pls. 46, 47) and some contemporary ceramics. Two of the three pendants from Monte Sele in Guanacaste (see chap. 1, pl. 16) are like this, while the third, only half a pendant, appears to be an avian axe-god.

Several clearly distinct styles, almost certainly representing different jade-carving workshops or centers, are readily apparent among the anthropomorphic pendants. A long tongue extending to the chest or waist, with cross-hatched, chevron, herringbone, or guilloche-patterned incising distinguishes one group. Some pendants from Greater Nicoya (pls. 48, 49) are arguably the most "Olmecoid" jades of Costa Rican manufacture. A recently published iconographic analysis of the latter[26] notes a



Plate 48. Figure-celt pendant from Guanacaste Province. *Checklist no. 23*



Plate 49. Figure-celt pendant reportedly from Bagaces vicinity, Guanacaste Province. *Checklist no. 24*

number of elements with clear Olmec antecedents, and with rare exception ("knuckle-dusters," scroll bar, torch) these elements are not known from other Costa Rican axe-gods. To that recent analysis other hypotheses can be added: the long tongue may symbolize the maize ear itself, or the tongue and its incised patterns may symbolize sustaining rainwater falling from the clouds. Another hypothesis is that these pendants include bloodletting symbolism, as bloodletting was practiced on the tongue, and among other things was thought to guarantee the earth's fertility.[27] On one (pl. 48) the impression of a mask is pronounced, and the four hooks or curlicues that emerge from behind the mask may represent speech scrolls. The personage behind the mask, or the deity represented, may be making a pronouncement.

Strikingly similar in style are two pendants (pls. 50, 51) from another jade-working center, the Central Pacific Watershed. These pendants are smaller and more three-dimensional, with tiny, foreshortened legs and feet. They portray masked personages in a sitting position. These Costa Rican axe-gods have been compared to Maya images on "belt celts" that depict an accession to power,



Plate 50. Figure-celt pendant from the Central Pacific Area.
Checklist no. 82



Plate 51. Figure-celt pendant from the Central Pacific Area.
Checklist no. 83

or the "seating in office," of a ruler (see chap. 2, fig. 37). To the ancient Maya, "to be seated" denoted accession to power. One of the pendants (pl. 51) has a complex headdress with a flattened eagle head on top; the tiny open wings resemble gaping-mouth creatures, and the thrusting talons resemble ears of maize. The mask on the lower face may be feline, with its wide row of teeth (also reminiscent of maize grains) and wide snout; speech scrolls or feline whiskers flow onto the cheeks from behind the mask. The other pendant (pl. 50) has simpler headgear (perhaps a basketry cap) with hatched chevrons, usually a crocodile symbol in central Costa Rica. Its mask is more mustachelike, leaving nose and mouth of human proportions. The lateral elements still resemble maize ears, and it may be a kind of nasal feline pendant.

A flatter, squared-off pendant of different style has a wide tongue descending from mouth to chest (pl. 52) that is especially maizelike. Volutes emerging from beside the nose on the lower face may be speech scrolls or feline whiskers. A guilloche pattern, indicating elite authority,



Plate 52. Figure pendant from the Central Pacific Area. Checklist no. 84



Plate 53. Figure-celt pendant from the Atlantic Watershed.
Checklist no. 102

appears top and bottom. The combination of elements gives the impression of a personage seated on a throne. Hands and feet are somewhat birdlike. This pendant is perforated both vertically and horizontally and, unusually, the incised design is partially worked on the back of the pendant.

Anthropomorphic pendants with bird aspects are also known from the Atlantic Watershed (pl. 53). A clearly human face complete with ear ornaments—always diagnostic of "humanness"—wears a quetzal headdress. Hands/wings are held in front of the chest with digits pointing down, as in the Olmec figure pendant (see chap. 2, pl. 23), and a possible skirtlike garment and splayed feet are sculpted on the celtlike blade. On many of these human pendants (masked or otherwise), images of lesser birds, such as kites and buzzards, are perched and bending over the ears of the main effigy. These smaller birds are high-soaring species, and it is possible they were considered emissaries, the all-seeing "eyes and ears" of a shaman-eagle. Shamans were thought to control certain animals and, protean in their powers, even to be able to change themselves into animals. This concept is more clearly displayed in certain ceramic effigy vessels of men's heads (fig. 47). The human posture is especially clear in another pendant (pl. 54), which has winglike extremities; the avian mask and two-bird headdress cover most human aspects of the head, except perhaps the nose area.

Other anthropomorphic pendants from the Atlantic Watershed clearly define human beings with arms and legs. They were made by cord-sawing the traditional celt form. One of these (pl. 55) is a high-quality translucent jade, yet the workmanship is basic. The two birds on the head are much larger than usual with curved, hooked beaks that leave no room for a headdress. The legs are perfunctory. Another (see checklist 40), from Guanacaste, by contrast, is cleanly executed, with stylized arms, legs, and feet, all shown approximately proportionate to one another. Outsized ears, perhaps symbolizing large ear ornaments, add weight to the already large head and



Fig. 47. Portrait head with attendant birds that are shamanic "eyes and ears" on a jar from Site 18-LM, Turrialba, Atlantic Watershed. Ceramic, H. 10 cm (3⅞ in.). Museo Nacional de Costa Rica, San José (18-5[22])



Plate 54. Bird-beak figure pendant reportedly from Línea Vieja area, Atlantic Watershed. *Checklist no. 103*



Plate 55. Figure pendant from the Atlantic Watershed. *Checklist no. 105*

pointed crown headgear. A zoomorphic mask, feline or crocodile, is worn, along with midriff belt/ligatures or short skirtlike garment. The incised guilloche patterns in this case most probably symbolize the woven mat, an adjunct of elite status and authority figures.

Mace Heads (Pls. 56–58)

Ceremonial mace heads have been found in Guanacaste, the Central Highlands, and the Pacific Watershed, as well as the Atlantic Watershed. Formerly referred to as war clubs, most mace heads are too small, lightweight, or fragile to have been weapons. All seem to have been made to be mounted on wooden staffs: a large vertical perforation (usually biconical and made with a tubular drill) is always a salient feature. It is probably more correct to interpret the mace heads as badges of politico-religious office or of clan affiliation. The nature of the handle, hafting, and other possible accoutrements, such as organic paint or feathers, would help to clarify the mace heads' use, but these are not known. The many mace heads recovered at the Tibás site, including the two on the funeral bier of metates in the Principal Tomb (see chap. 1, fig. 16), were almost certainly not hafted, judging from their positions in the burials. Two mace heads (pl. 56 and



Plate 56. Owl-head ceremonial mace head from Guanacaste Province. *Checklist no. 58*



Plate 58. Head-form ceremonial mace head from Guanacaste Province. *Checklist no. 54*



Plate 57. Head-form ceremonial mace head from Guanacaste Province. *Checklist no. 56*

see fig. 40) represent raptors with two feather tufts, seen so frequently on jade axe-god pendants, while another (pl. 58) seems to be a squirrel monkey of the genus *Saimiri*, which displays a strange cylindrical projection on the forehead and smaller ones on the jowls. Also seen on some effigies of human trophy heads, these projections may have had to do with the processes of preparing or displaying shrunken heads. Another mace head (pl. 57) is probably a jaguar effigy head, perhaps with some human features.

Bat-Wing Pendants (Pls. 59–61)

"Bat wing" has become a kind of generic term for several kinds of horizontal pendants. Costa Rican examples, are said to be "mainly medium sized and made of jade or greenstone, [which] range from abstract ornaments to comparatively literal bat representations, and on to composite creatures with wings elaborated into profile animal heads."[28] In reality, the most consistent feature seems to be the profile crocodile heads at the end of each wing (pls. 59, 60). Bat and crocodile imagery is frequently seen on ceramics that are contemporary with jade carving in northwestern Costa Rica. Probably broken and reworked, the pendant in plate 59 retains the dual crocodile heads as stubby wings. Unusual in this group for its cord-sawn profiling of the crocodile heads, the pendant in plate 60 has an enigmatic circular motif at its center rather than anything recognizably animal or human. Others have



Plate 59. Double-end animal pendant from the Atlantic Watershed. *Checklist no. 85*



Plate 60. Double-end animal pendant reportedly from Línea Vieja area, Atlantic Watershed. *Checklist no. 108*

human (or at least anthropo-zoomorphic) heads at the center.[31] However, many of these pendants show birdlike features, as in a large bird (owl, eagle) alighting with wings fanned out and talons thrust forward. A more realistic wing shape with the proportion and general impression of "alighting big bird" is seen in the example from Las Huacas, Guanacaste (fig. 48). In addition to the two profile crocodile heads at the wing tips and scutes incised along the top of the wings, there are two stylized triangular human heads (possibly trophy heads) on wings just outside a guilloche pattern with drilled dots, most likely associated with the central figure, which resembles a human-feline composite.

Some pendants in this class are clearly made from one or another of the axe-god variants—a profile quetzal, for instance[29]—and are also perforated to hang vertically. One pendant (pl. 61) maintains the unmodified celt form with only incised motifs and has clear crocodile scute symbols (hatched triangles on the wings of the central figure). If hung vertically, the top set of hinged crocodile jaws would become the eyes of an avian creature, the linear feet of the horizontal central figure become hands,



Fig. 48. Bat-wing pendant from Las Huacas site, Guanacaste Province. *Checklist no. 46*



Plate 61. Bat-wing pendant from Guanacaste Province. *Checklist no. 44*

and the crocodile jaw hinge at the wider end of the celt becomes a maize-plant symbol very similar to that found in Olmec iconography.[30]

Beak-Bird Pendants (Pls. 62–67)

Purely avian images are rare among Costa Rican jades although they do exist, as for example in plates 62 and 64. More frequent are the jades depicting birds, both in profile and three-dimensional representations, in which the presence of a carbuncle suggests a buzzard, vulture, or similar carrion-eater. The nonrealistic beak, from which the pendants get their name, curves down more than half the body length (pl. 42), or even recurves into a circular or squared-off spiral (pl. 63; and see checklist 33). It has been considered by earlier authors to be a fertility symbol of Caribbean Arawak origin.[32] The argument is unconvincing because contact between Atlantic Costa Rican polities and the Caribbean islands during the period jade was carved was probably limited, and the Arawak lapidary tradition is not similar. Rather, these fantastic birds probably represent funerary or sacrificial-rite attendants who



Plate 62. Profile bird pendant reportedly from Guanacaste Province. *Checklist no. 34*



Plate 63. Profile bird pendant from the Atlantic Watershed. *Checklist no. 113*



Plate 64. Profile bird pendant from Mercocha site, Williamsburg vicinity, Línea Vieja, Limón Province. *Checklist no. 115*



Fig.49. Flying panel metate reportedly from Guápiles vicinity, Línea Vieja, Limón Province. The central figure wears a crocodile mask and stands on a jaguar. Birds with human heads in their beaks adorn the legs. Stone, H. 46 cm (18⅛ in.). Museo Nacional de Costa Rica, San José (73.981)



Plate 65. Profile bird pendant from the Atlantic Watershed. *Checklist no. 114*



Plate 66. Profile bird pendant reportedly from Guácimo vicinity, Línea Vieja, Limón Province. *Checklist no. 117*

carried the dead to the next world, as seen so clearly on the Atlantic "flying-panel" metates (fig. 49), themselves contemporary with the jades and frequently found with them.[33] The vulture (pl. 65) perches on the back of the stylized human victim, perhaps seeking to remove the head; it has a small helper head on its back. A severed human head such as that under the bird in plate 66 may well have been seen as a graphic and ritual synonym for seed, i.e. better agriculture through sacrifice. Some figures have been related to beak-bird imagery,[34] such as a human figure costumed with crocodile mask and head-dress, and a hanging recurved element in the mouth, perhaps a snake (pl. 67)

Cord-Sawn Jades

For more than fifty years it has been said that the technique of cord-sawing flowered in the Atlantic Watershed rather than in Guanacaste to the northwest. This does seem to be the case, and as the jade-carving tradition began to decline after A.D. 500, the late jades found in Greater Nicoya tend toward simplicity of form and technique. They are cut-down and divided axe-gods (see checklist 16) or plain perforated slices of jade, sometimes with linear, sloppily executed incision. The Atlantic tradition, on the other hand, may actually have become baroque with a greater variety of complex motifs. Some even echo the stylistically distinct images of objects cast in

gold and gold-copper alloys, a new technology (and new mythic symbolism) recently arrived from northern South America. However, cord-sawing of jade was practiced to a certain degree in all the jade-working regions of Costa Rica. The technique uses holes, formed by drilling with hard drills—perhaps made of palm wood or bone—and abrasives, through which a rawhide cord was threaded. The cord was coated with a fine sand abrasive (mostly quartz) that was slightly harder than jade, and then "sawn" in various directions from the originating hole. Distinct openwork patterns were produced.

Staff-Bearer Pendants (Pl. 68)

Staff-bearer pendants are usually finished by cord-sawing and often have baroque, multiple-aspect images. A person with mask and/or headdress standing or moving (dancing?) carries a vertical staff crowned with a zoomorphic effigy, almost always avian (pl. 68). As many mace heads are avian, it is tempting to interpret the bird figure on the staff as a mace head in use during a ritual. Admittedly, they are disproportionately large, but then so are the staffs nonrealistic. The avian effigies may represent larger mace heads made of perishable materials, or the



Plate 67. Profile masked-figure pendant reportedly from Línea Vieja area, Atlantic Watershed. *Checklist no. 112*



Plate 68. Staff-figure pendant reportedly from the Vereh site, Talamanca region, Limón Province. *Checklist no. 86*



Plate 69. Two masked-figure pendants from the Atlantic Watershed. *Checklist nos. 89, 90*

technical difficulties of jade carving may have resulted in the artificial enlargement of elements of the pendants' composition.

As has been noted for many years, the jade staff bearers resemble carvings on the famous Puerta del Sol at Tiahuanaco, Bolivia,[35] but any direct stylistic relationship is highly unlikely. There is no evidence of contact or trade between the civilizations of the central Andes and Costa Rica at the time the jades were being produced.

Other Complex Pendants (Pls. 69–75)

Figures with crocodile headdresses, which are perhaps skeletal and are topped with a double element show other multi-aspect images (pl. 69). From the front, two humanoid faces are visible in the head pieces, done in the style of the tiny attendant birds. The two figures hold solid oval objects in each hand, the significance of which is



Plate 70. Profile stacked-figures pendant from the Atlantic Watershed. *Checklist no. 111*

Plate 71. Front of stacked-figures pendant from the Atlantic Watershed. *Checklist no. 87*



Plate 72. Side of stacked-figures pendant in plate 71.



Plate 73. Masked-figure pendant from the Atlantic Watershed. *Checklist no. 93*



Plate 74. Profile masked-figure pendant from the Atlantic Watershed. *Checklist no. 94*



Plate 75. Double monkey pendant from the Atlantic Watershed. *Checklist no. 92*



Plate 76. Figure pendant from the Atlantic Watershed.
Checklist no. 107

unclear. Very similar objects appear in the hands of small, realistic female figurines in volcanic stone of several centuries later; perhaps they are maize ears or maracas. A complex pendant of unusual shape (pls. 71, 72)—it is almost fanglike—displays a fantastic piling up of five distinct motifs. On top is a person with crocodile mask and headdress (the circular tiers of the latter invariably symbolize the crocodile, for reasons yet unknown), with serpent or flute descending from the jaws. This large figure stands on the bent head and shoulders of a smaller seated human figure with a beak-bird head in his hands. His oppressed posture and gaping mouth may mean that he has been sacrificed or is about to be. Below him is an upside-down image perhaps symbolizing a seed from which the dynamics—agricultural fertility and abundance—of the whole composition spring, a seed sown by the superior masked human-crocodile.

A somewhat similar scene in much smaller scale appears in another pendant (pl. 70) where a seated masked personage, with a tiny crocodile on its head, makes the figure below it bend over, much in the posture of someone about to be beheaded. Other crocodile-snouted images (pls. 73, 74) are reminiscent of the staff-bearer jades. A profile pendant (pl. 74) has no detail other than that revealed by the profile itself and the cord-sawn openings. Another (see chap. 4, pl. 88) has profile curly-tailed animals at each end and profile faces beneath them. If hung horizontally, it would be shaped like a bat-wing pendant with a vacant central space. Such purposeful ambiguity is very characteristic of many Costa Rican jades.

A particularly baroque pendant is one in which two monkeys are portrayed in mirror-image effigies (pl. 75). The monkey heads are at opposite ends of the horizontal pendant, each with one hand in its mouth. The other hand holds its tail over its back. The tails are long, curved elements that end in a snake head. The monkey with hand in mouth and holding its tail is a typical pose from nature. Here it is used to take advantage of the shape of the jade piece being carved. Identically posed monkey effigies, fully in the round, adorn the tripod legs of some flying-panel metates, which are contemporary with jade use in the Central Highlands–Atlantic Watershed.[36]

Circular-Motif Pendants (Pl. 76)

Concentric circles in relief appear at the center point of a number of compositions. In two pendants (pl. 76; and see checklist 106) the circles appear at the navel. In another (see pl. 60) the circle replaces the key central image of a bat-wing pendant. The figure in plate 76 was previously identified as a male with an exaggerated navel,[37] but the figure appears to be female with rudimentary breasts (not often seen on males or masked persons) and an unusual skirt or girdlelike garment around a noticeably expanded



Plate 77. Pendant from Guanacaste Province. *Checklist no. 42*



Plate 78. Pendant with goethite inlay from the Nosara Valley, Nicoya Peninsula. *Checklist no. 41*



Plate 79. Pendant from the Atlantic Watershed. *Checklist no. 110*

waistline. The striking circular motif might stand for a concept such as "basic life force," or "essence of." Perhaps it is graphic shorthand for "incomprehensible power."The symbol is also found on pendants with no other decoration (see introduction pl. 6).

Open and Articulated Pendants (Pls. 77–80)

Open circle pendants (pl. 77) were probably created from axe-god shapes. Here, interpretations such as "basic life force" or "incomprehensible power" would not seem out of place, although the holes are not at the center point but where the celt blade would be. The pendant in plate 77 shows tiny attendant beak birds sitting, not on a human head but on the interwoven symbol for authority, itself surmounting a herringbone-patterned bar with a head at

Plate 81. Necklace found adjacent to Principal Tomb, Talamanca de Tibás site, San José Province. Checklist no. 80



Plate 80. Linked ornament possibly from the Atlantic Watershed. *Checklist no. 88*

each end above the circular hole. Such circular holes may have a more prosaic explanation. The pendants may double as ritual rings, as seats for inlays, or as anchors to hang something larger in a pendant-necklace display. A circular goethite inlay appears in one pendant (pl. 78). Another with a central open oval (pl. 79) instead of a circle, has crocodile-scute incising, four tiny saurian effigies around the edge, and a very stylized face at the top. Articulated jades such as that in plate 80, which links a double-headed snake or jaguar, are very rare. This piece was probably an element in a necklace.

Necklaces (Pl. 81)

Virtually all the Costa Rican jade necklaces in museums and other collections were strung by modern owners.[38] An



Plate 82. Tubular bead reportedly from Bagaces vicinity, Guanacaste Province. *Checklist no. 48*



Plate 83. Tubular bead with snake heads from the Atlantic Watershed. *Checklist no. 118*



Fig. 50. Masked figure wearing a necklace consisting of a large horizontal bead and vertical pendants, from the Atlantic Watershed. Stone, H. 37 cm (14⅝ in.). Museo del Jade, San José (INS 6399)

exception is the long necklace of circular disk beads discovered in the Tibás burial ground in 1977 (pl. 81). Three large beads of white, greenish brown, and blue-green stones were placed symmetrically along the main strand from which hang four secondary strands. This necklace was discovered 1.5 to 2 meters (5–7 ft.) to the southeast of the principal Tibás burial that contains the Olmec clamshell jade. The organic string had decomposed, but the whole necklace could be observed in its original strung position. The three large, different colored beads probably had symbolic importance, unknown today.

The single large, beautiful blue-green jade bead (see chap. 1, pl. 19) found in the Tibás burial with the Rosales Zoned Engraved bridge-and-spout ceramic monkey effigy vessel (see chap. 1, pl. 18) may have been placed in the mouth of the deceased; this could not be confirmed, as bones and teeth had turned to dust.

Tubular Beads (Pls. 82, 83)

Always perforated longitudinally and sometimes with multiple transverse holes, long tubular jades such as those in plates 82 and 83 can reach 50 centimeters (almost 20 in.) across. Many have concave barrel shapes carved around them, probably to better anchor tied-on elements. Some, made from high-quality material, bespeak a plentiful supply of jade. Given the stone's hardness the long perforations are extraordinary. Decades ago, the fanciful

idea that these tubes were intended as breast supports or brassieres was implanted in the literature.[39] This interpretation is unlikely; instead, such tubular beads probably constituted a horizontal suspension element (thus the transverse holes) in large-bead jade necklaces such as those seen on the later crocodile-masked male figures in volcanic stone (fig. 50). Smaller tubular beads come in similar forms, including an undulating snake (see checklist 47, 119).

Earflares (Pl. 84)

As so many jade, ceramic, stone, and gold representations of human beings are shown wearing earflares in Costa Rica, it is assumed that most of those worn in life were made of perishable materials. Jade, ceramic, and gold examples are known, and although earflares of jade are rarely seen, they do exist (pl. 84).

Miniature Jars

The enigmatic tiny jars (see chap. 1, pl. 21) with central hollows and smaller perforations for the strings that kept their caps in place have analogues in ceramic. The ceramic examples are often shaped as realistic human trophy heads, also with caps. The jade jars are really no larger than big spherical beads (see checklist 52), with a hollow smaller in diameter than the width of a human fingernail. Some highly concentrated substance, such as a poison or a hallucinogen, may have been kept in the jars. Perhaps it was something profoundly symbolic, such as a special face-painting pigment, or the jars may have functioned as a type of reliquary.

Curly-Tailed Animals (Pl. 85)

Among the latest jades carved in Costa Rica, probably between A.D. 500 and 700, are some with motifs similar to those of certain gold pendants. New World metallurgy had its origin in the Andean cultures of South America, and sophisticated lost-wax casting diffused northward from Colombia, the technology reaching Costa Rica sometime between A.D. 300 and 500. It is not yet possible to determine how long jade and gold objects coexisted in Costa Rica, because the two materials have only rarely been found together in tombs.[40] The most recognizable



Plate 84. Pair of ear ornaments from Guanacaste Province. *Checklist no. 49*



Plate 85. Two curly-tailed animal pendants possibly from the Mercocha site, Williamsburg vicinity, Línea Vieja, Limón Province. *Checklist nos. 121, 122*



Fig. 51. Curly-tailed animal pendant from Costa Rica or Panama. Gold-copper alloy, H. 2.5 cm (1 in.). The Metropolitan Museum of Art, New York. Bequest of Edward C. Moore, 1891 (91.1.1166)



Plate 86. Winged pendant from the Atlantic Watershed. *Checklist no. 123*

motifs that bridge the gap between lapidary work and metallurgy are the toad/frog[41]; the monkey with tail arched over the back and hand in mouth or on head[42]; and the generic "curly-tailed animal" (pl. 85, fig. 51). While jade carving in Costa Rica is for the most part figural, sculptural, and three-dimensional, the equally figural products of metallurgy emphasize flat, reflective surfaces. They are more complex, too, with an abundance of secondary motifs.

Winged Pendants (Pl. 86)

Stylized winged pendants are conceptually similar to the bat-wing pendants but without elaboration (pl. 86). They are "a distinctive flat form perforated to hang horizontally. Found in greatest numbers in Colombia, they are characteristic of coastal Venezuela as well; Panamanian ones are typically agate, those of northwest Costa Rica sometimes jadeite."[43] As there are no ceramic associations for these pendants in Costa Rica, they cannot be dated even relatively. Yet, given the time period for intensive jade carving in Costa Rica, Central American examples seem to take precedence. Examples from northern South America appear in cultures such as the Tairona, which date to several centuries later.

* * *

In Costa Rica, from about 300 B.C. until A.D. 500–700, a vigorous, prolific, and idiosyncratic tradition of jade carving flourished. It was stimulated by earlier Mesoamerican traditions of reverence for jade and its figural carving. The dynamics of that stimulation process, or when it first began to occur, are not yet understood. A few other seemingly Mesoamerican traits are known from the northern half of Costa Rica during the period in question: a strong tradition of red-on-buff pottery, rectangular (four-cornered) houses and tombs, bell-shaped storage pits and maize agriculture.[44] But Costa Rica, mostly covered by tropical rain forest, was never part of Mesoamerica, nor did Mesoamerican peoples reside there during the jade-carving period, with the possible exception of sporadic trade missions.

After A.D. 500, drastic shifts began to occur in Costa Rican Precolumbian cultures. Circular houses became the norm and were indicative of a probable shift in cosmogony or "world view." New ceramic styles including resist decoration proliferated; tomb forms and burial customs changed; cobble-paved roads within and between sites appeared; and metallurgy supplanted jade carving as the principal supplier of politico-religious badges of power and authority. Gold replaced jade as the most important symbolic material. All these traits appeared earlier in, and are typical of, northern South America, but the process by which the shifts to Costa Rica took place is not yet clear. It is known that jade-carving centers in the Atlantic Watershed became gold-working centers, whose products eventually made their way to Mesoamerica and have been found, for example, in the Sacred Cenote at the important Maya site of Chichén Itzá in Yucatán.[45]

1. Graham 1995.
2. Garber et al. 1993: 211–12.
3. Graham 1995: 21.
4. Lange 1993b.
5. Stirling 1968: 26.
6. Sahagún 1963: 222–23, 225–26.
7. Hammond 1991: 8.
8. Ibid.
9. David Mora Marín: personal communication.
10. Joralemon 1976: 47–58.
11. Snarskis 1981: 51, 202–203, nos. 144–46.
12. Pohorilenko 1981.
13. Lange 1993a: 287–88.
14. Easby 1968: 81; see also Snarskis 1981: 29; 1984a: 216–19; 1992: 148.
15. Joralemon 1971: figs. 162–68; 1976: fig. 12.
16. Graham 1993: 22–23.
17. Popenoe 1934: 67, 73.
18. Joralemon 1976: 52 and fig. 20.
19. Snarskis 1981: 200, no. 132.
20. Almost twenty years ago, I published the discovery of the 33-cm-wide jade clamshell at the Talamanca de Tibás site just outside San José. A 1977 salvage operation, the Talamanca de Tibás excavation, was conducted by archaeologists under my direction from the Museo Nacional de Costa Rica. The clamshell jade was located in what has come to be called, because of the quality of the contents, the Tibás Principal Tomb. However, as the site had been much destroyed by heavy machinery and looting before salvage began, the relative "hierarchy" of Precolumbian tombs there is unknown.

    In the 1979 article on the clamshell jade in *Vínculos*, "El Jade de Talamanca de Tibás," I made numerous references to Izapa material culture, in addition to several Olmec comparisons, and concluded that it was possible that "the piece [was] a product of the period transitional between Olmec and Izapa" (p. 89). The Izapa comparisons did not hold up to the scrutiny of Lee Parsons in the Denver Conference on Precolumbian Jade held in 1987. His thoughts on "The Izapa Style and the Tibás Jade" were published with the conference papers in 1993, and he concluded that the clamshell was Olmec. In the two decades since its discovery, I too have come to consider the Tibás jade as purely Olmec. Many of its characteristics have analogues to published works from Olmec sites on the Mexican Gulf Coast and elsewhere, although its place of manufacture remains conjectural. It is the only Olmec jade scientifically excavated in Costa Rica and it is uniquely well preserved. In my opinion it is one of the largest and most skillfully worked Precolumbian jades ever found in the Americas.
21. Fonseca and Scaglion 1978: 285, 289.
22. Drucker 1955: pl. 36F.
23. Andrews 1986a: fig. 8b.
24. Drucker 1955: 59–60.
25. Fonseca and Scaglion 1978: 285, 289–90.
26. Graham 1995.
27. Joralemon 1996: 256, no. 100.
28. Easby 1968: 61.
29. Soto 1996: 99, top.
30. Joralemon 1971: 13, motif 83; 59, no. 170; 60, no. 173.
31. Balser 1980: 70, bottom; Snarskis 1981: 184, no. 38.
32. Stone 1972: 204–205; Balser 1980: 30, 99–100.
33. Snarskis 1992: 145–46; Graham 1992: 181–88.
34. Easby 1968: 54.
35. Balser 1974: 72; 1980: 30, 92; Soto 1996: 114, left.
36. Snarskis 1981: 202, no. 145.
37. Ibid.: 206, no. 165.
38. Balser 1980: 113–16; Soto 1996: 93, 120.
39. Balser 1958: 13; 1980: 80.
40. See chap. 1 in this volume.
41. Balser 1980: 112, left and right; Snarskis 1981: 227, no. 288.
42. Balser 1980: 108, top; Snarskis 1981: 224, no. 267.
43. Easby 1991: 339, figs. 2–4.
44. Snarskis 1984b.
45. Coggins and Shane 1984.



4. THE COLLECTIONS OF THE MUSEO DEL JADE MARCO FIDEL TRISTÁN CASTRO, SAN JOSÉ

ZULAY SOTO MÉNDEZ

The Museo del Jade Marco Fidel Tristán Castro is housed on the eleventh floor of the National Insurance Institute building in the heart of the Costa Rican capital city, San José. Renowned worldwide, the museum exhibits the largest collection of Precolumbian American jade found in Costa Rica.

The National Insurance Institute (Instituto Nacional de Seguros/INS), a Costa Rican insurance agency founded in 1924, has subsidized the museum since its inception. INS began to acquire its archaeological collection in 1971, and two years later, after the adoption of Costa Rican law no. 5176, its holdings grew substantially. The law empowered the federal government, as well as private and semiautonomous institutions and municipalities, to designate portions of their annual budgets for promoting Costa Rican literature and art, preserving national monuments, and acquiring both archaeological pieces and the works of Costa Rican artists. Prior to the passage of this law, archaeological pieces had been sold to the highest bidder and freely exported from Costa Rica, depriving the country of part of its valuable, ancient cultural heritage.

Until this time, large holdings of antiquities were in private hands, jealously guarded and generally unavailable to the public. After law no. 5176 was adopted, the National Insurance Institute began to acquire its best collections, particularly of jade. Most of these acquisitions were made in consultation with Costa Rican archaeologist Carlos Humberto Aguilar, as well as the curators of the Museo Nacional de Costa Rica, who authenticated the objects. In 1981 another law, no. 6703, further regulated the acquisition of archaeological pieces. From that date forward, INS has respected this law, which attempts to end the illicit traffic in antiquities, and has abstained from buying archaeological artifacts.

The first and largest group of jades came to INS in 1973 from Oscar Herrera Mata, who had meticulously formed his collection, consisting of 1,092 pieces of jade, many years earlier. In 1974 Carlos Balser's well-documented collection of 250 high-quality jades entered the INS museum. Balser had carried out extensive research on jade and had made significant contributions to the field, both within Costa Rica and abroad. Among Balser's holdings were some 20 Olmec and Maya pieces; others were of Costa Rican manufacture.

In 1977 the museum acquired 120 pieces from the discerning collector Alfonso Jiménez Alvarado, and between that year and 1981, 695 objects of superb quality from the holdings of Hernán Páez Umaña and Carlos Roberto Páez, entered the INS collections. These groups of objects formed the core of the Museo del Jade Marco Fidel Tristán Castro. Initially named the Archaeological Collection of the National Insurance Institute, the museum was inaugurated on October 31, 1977. On that occasion, Marco Fidel Tristán Castro, the executive president of INS and the main promoter of the museum, said in his opening address, "The National Insurance Institute, in its desire to underscore all the efforts that have been undertaken in this country to promote art and culture, has seen fit to acquire a valuable collection of Precolumbian objects, with special emphasis on jade, so that Costa

Plate 87. Bird-head spacer pendant for multiple strings of beads reportedly from the Guápiles vicinity, Línea Vieja, Limón Province. Ex coll.: Hernán Páez Umaña and Carlos Roberto Páez, San José. *Checklist no. 100*



Plate 88. Pendant with mirror image animals, and profile heads on the top and bottom, from the Atlantic Watershed. Ex coll.: Oscar Herrera Mata, San José. *Checklist no. 95*

Ricans and foreigners who visit the museum may have the opportunity to admire the marvelous art of the indigenous people of this country." The president of Costa Rica, Daniel Oduber Quirós, noted in his remarks, "Efforts such as these, by the National Insurance Institute, deserve the support of everyone because they advance our culture and increase the world prestige of Costa Rica as a cultivated country." Two years later, to honor the man responsible for forming such an extraordinary jade collection, the Archaeological Collection was renamed the Museo del Jade Marco Fidel Tristán Castro.

Unfortunately, most of the museum collections lack archaeological context because the objects were not scientifically excavated. Nevertheless, the Museo del Jade has done everything possible to remain current with recent discoveries made by archaeologists of the Museo Nacional de Costa Rica and the Universidad de Costa Rica. Efforts are being made to document the objects that are displayed in the installations of the Museo del Jade. As archaeological remains, these objects confirm the existence of cultures that developed thousands of years ago in what is now called Costa Rica. They constitute Costa Rica's cultural heritage. Some are objects of widespread use, while others are artistic manifestations of cults or religious rites among the ethnic groups that produced and used them. Because these objects reveal the character and the degree of civilization of their makers, they become increasingly valuable and are worthy of preservation, conservation, and exhibition in museums both in Costa Rica and abroad.

* * *

My first job at the National Insurance Institute was in 1973. After receiving museum training at the Paul Coremans Institute in Churubusco, Mexico, on a scholarship from the Organization of American States, I began to catalogue each piece in the collection. I was astonished by the quality of the work. Several boxes, for example, contained magnificent jade carvings from the collection of Oscar Herrera Mata, such as the pendant in plate 88. These beautiful examples of Costa Rican Precolumbian art came as a surprise, and I felt compelled to contact the foremost Mexican anthropologist, Daniel Rubín de la

Borbolla, about this extraordinary collection. He identified the work as some of "the jadeite pieces that so appealed to the Olmecs, who traveled great distances from time immemorial to the southern regions of Mesoamerica in search of bluish green jade." I informed Marco Fidel Tristán Castro that these highly unusual objects were of cultural significance and undoubtedly of immense monetary value as well. He had always shown special interest in increasing the size of the INS collection, particularly of jade.

By this time, the Carlos Balser collection had entered the museum, and it had come with information on Precolumbian Costa Rican jade. Balser's views had had a major impact in the field with the publication of *El Jade de Costa Rica* (1974) and *Jade Precolombino de Costa Rica* (1980) on the Museo del Jade collections. Pieces treasured by Balser are illustrated in this catalogue and are included in the exhibition it accompanies. Among the jades described by Balser in *El Jade de Costa Rica* are two of Maya manufacture (see chap. 2, pls. 29, 30), which is rare in Costa Rica. Many others were locally made.

One of the most select groups acquired by the museum is that of Alfonso Jiménez Alvarado, whose collection included jades notable for their delicacy and beauty, such as the animal-celt pendant in plate 89. A reworked Olmec spoon (see chap. 2, pl. 25) was also part of this group. Of all the museum's holdings, however, the most extraordinary jades are to be found in the collection formed by Hernán Páez Umaña and Carlos Roberto Páez. They include some remarkable and exquisite pieces, particularly those of jadeite. The Olmec jade representing a hand (see chap. 2, pl. 22) and the Olmec spoon (see chap. 2, pl. 26) with Maya glyphs incised years after the spoon was made, are outstanding. There are also beautiful pieces of local manufacture, such as the figure-celt pendant (pl. 90) and the bird-head spacer (see pl. 87). Once the assembly of these great collections had been completed, efforts were made to enlarge the installations of the museum. In October 1981 the new Sala de Jades was inaugurated, thanks to the support and enthusiasm of the executive president of INS then in office, Cristóbel Zawadzki W.

In 1992 seventy representative jades from the INS collections went to Seville, Spain, as part of the exhibition



Plate 89. Animal-celt pendant reportedly from the Línea Vieja area, Atlantic Watershed. Ex coll.: Alfonso Jiménez Alvarado, San José. *Checklist no. 101*



Plate 90. Figure-celt pendant from Guanacaste Province. Ex coll.: Hernán Páez Umaña and Carlos Roberto Páez, San José. *Checklist no. 15*

"Oro, Jade, Bosques, Costa Rica" for the Quincentennial celebration of Christopher Columbus's first journey to America. These jades have also been shown in the United States as part of an exhibition organized by the Trust for Museum Exhibitions, Washington, D.C., and the Museo Nacional de Costa Rica. The exhibit traveled to several different venues before returning to San José in 1998 for a temporary display there.

More than two thousand pieces in the collections of the Museo del Jade are of jade. In reality they are of many materials, primarily jadeite but also chalcedony and serpentine, while the rest correspond to materials such as andesite. Archaeologists have coined a term to refer to all of these archaeological greenstones as "cultural jade" or "social jade." Such a designation alludes to the fact that all Mesoamerican ethnic groups worked the greenstone that they found, whether or not it was actually jade, in the same belief that it was a divine material.

CHECKLIST OF THE EXHIBITION

The Museo del Jade Marco Fidel Tristán Castro, Instituto Nacional de Seguros, San José, is given below as "Museo del Jade, INS."

Note: The material designations are minerals identified by different means. The principal mineral listed is jadeite (the stone is jadeitite). The works marked XRD have recently undergone X-ray diffraction analysis in the Sherman Fairchild Center for Objects Conservation at The Metropolitan Museum of Art. Objects from the collection of the Museo del Jade, INS, were classified in 1987 using specific gravity, hardness, color, and luster by professors from the Escuela de Geología, Universidad de Costa Rica, and many of them appear so classified here. Pieces simply labeled "jade" have yet to be examined and/or identified by instrumental analysis.



No. 33

SOUTHERN GREATER NICOYA

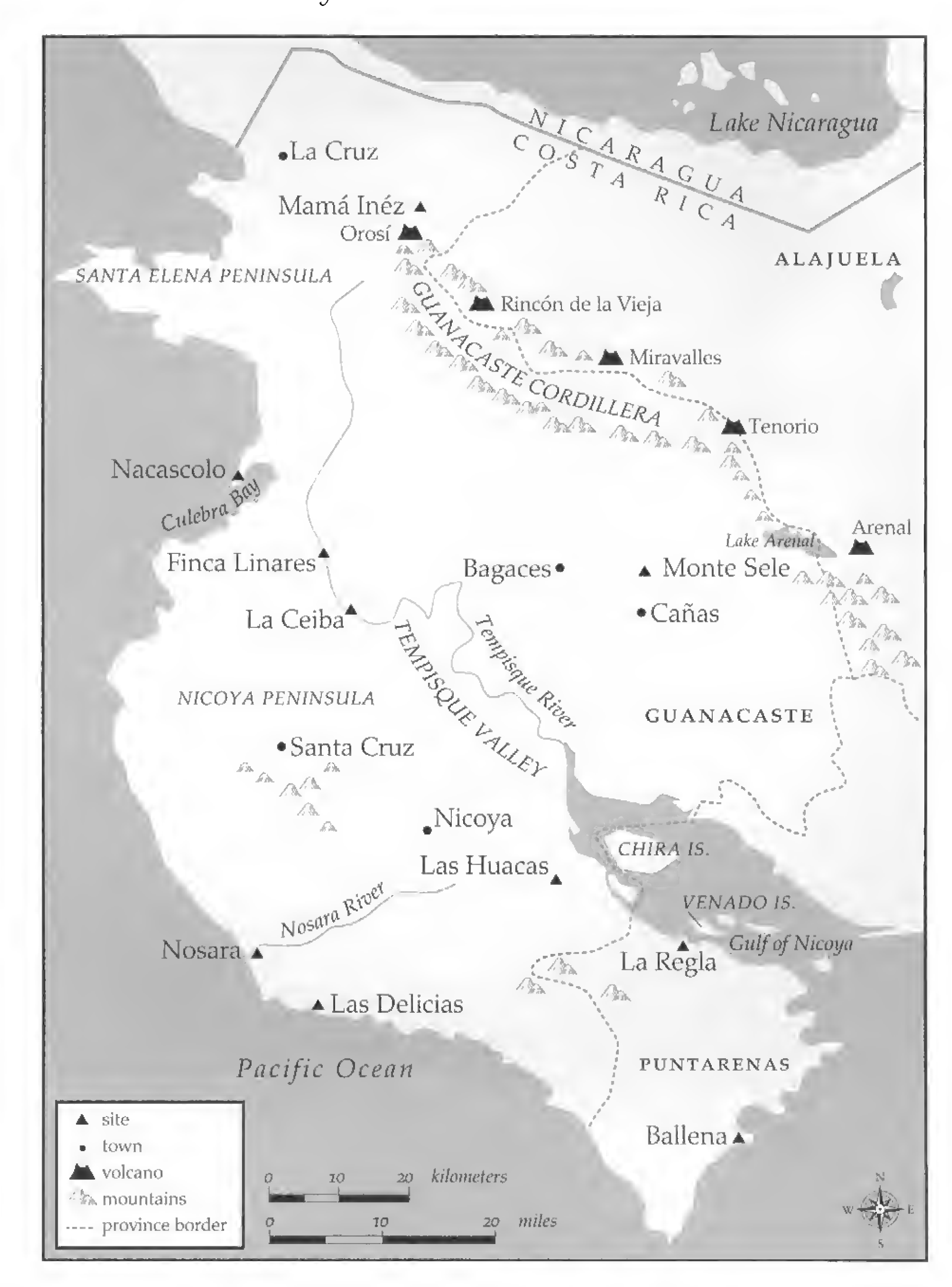
1. Cut pebble
Jadeite (XRD); 6.1 x 11.8 cm (2⅜ x 4⅝ in.)
Carnegie Museum of Natural History 2939/80
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Published: Hartman 1907, pl. 32 (figs. 3, 4) and pp. 52, 86; Fonseca Z. and Scaglion 1978, fig. 5 (p. 288)
Ill. pls. 12, 13

2. Working celt
Stone; 12.8 x 5.1 cm (5 x 2 in.)
Carnegie Museum of Natural History 2939/31
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Ill. fig. 43

3. Working celt
Stone; 13.6 x 5.5 cm (5⅜ x 2⅛ in.)
Carnegie Museum of Natural History 2939/33
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Ill. fig. 44

4. Working celt
Jadeite (XRD); 9.3 x 3.8 cm (3⅝ x 1½ in.)
Carnegie Museum of Natural History 2793/72
Provenance: Disturbed Burial XVI, Las Huacas site, Nicoya Peninsula, Guanacaste Province; excavated by Carl V. Hartman, Carnegie Museum of Natural History, 1903
Published: Hartman 1907, fig. 50, p. 30
Ill. pl. 10

Southern Greater Nicoya



5. Blade-form pendant
Jadeite (XRD); 17.6 x 2.7 cm (6⅞ x 1 in.)
Carnegie Museum of Natural History 2939/892
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Published: Hartman 1907, pl. 45 (fig. 7) and p. 89
Ill. pl. 1 (left)

6. Blade-form pendant
Jadeite (XRD); 11.3 x 2.7 cm (4½ x 1 in.)
Carnegie Museum of Natural History 2939/901
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Ill. pl. 1 (right)

7. Blade-form pendant
Jadeite (XRD); 25.8 x 6.5 cm (10⅛ x 2½ in.)
Carnegie Museum of Natural History 2939/889
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Ill. checklist no. 7



No. 7

8. Celt-form pendant
Jadeite (XRD); 10.8 x 4.9 cm (4¼ x 1⅞ in.)
Carnegie Museum of Natural History 2939/1045
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Ill. pl. 8

9. Bird-celt pendant
Jadeite (XRD); 13.6 x 5.5 cm (5⅜ x 2⅛ in.)
Museo Nacional de Costa Rica P-30-Rg, Entierro 4, Artefacto 1
Provenance: La Regla site, Nicoya Peninsula, Puntarenas Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1989–91
Published: Guerrero, Vázquez, and Solano 1992, p. 28, fig. 4
Ill. fig. 11

10. Ceremonial metate
Stone; 26.5 x 61.2 cm (10⅜ x 24⅛ in.)
Carnegie Museum of Natural History 2793/13
Provenance: Burial VIIIa, Las Huacas site, Nicoya Peninsula, Guanacaste Province; excavated by Carl V. Hartman, Carnegie Museum of Natural History, 1903
Published: Hartman 1907, pl. 6 (figs.1, 2), pl. 7 (fig.1), p.18
Ill. pls. 2, 3

11. Figure-celt pendant
Heulandite (XRD); 8.1 x 3.1 cm (3⅛ x 1¼ in.)
Carnegie Museum of Natural History 2793/14
Provenance: Burial VIIIa, Las Huacas site, Nicoya Peninsula, Guanacaste Province; excavated by Carl V. Hartman, Carnegie Museum of Natural History, 1903
Published: Hartman 1907, figs. 6–8, pp. 18–19
Ill. pl. 4

12. Figure-celt pendant
Albite? (XRD); 10.7 x 4.5 cm (4¼ x 1¾ in.)
Carnegie Museum of Natural History 2793/15
Provenance: Burial VIIIa, Las Huacas site, Nicoya Peninsula, Guanacaste Province; excavated by Carl V. Hartman, Carnegie Museum of Natural History, 1903
Published: Hartman 1907, figs. 9–11, pp. 18–19
Ill. pl. 5

13. Figure-celt pendant
Jade; 14.4 x 4.9 cm (5⅝ x 1⅞ in.)
Museo del Jade, INS 6602
Provenance: site unknown
Published: *Centro America* 1992, cat. no. 272
Ill. pl. 46



No. 16

14. Figure-celt pendant
Jadeite (XRD); 13.5 x 4.7 cm (5¼ x 1⅞ in.)
Museo del Jade, INS 6606
Provenance: site unknown
Ill. pl. 47

15. Figure-celt pendant
Jade; 14.0 x 5.6 cm (5½ x 2¼ in.)
Museo del Jade, INS 6610
Provenance: site unknown
Ill. pl. 90



No. 22

16. Half a figure-celt pendant
Jadeite (XRD); 17.6 x 2.0 cm (6⅞ x ¾ in.)
Carnegie Museum of Natural History 2939/410
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Published: Hartman 1907, pl. 43 (fig. 4) and p. 87; pl. 34 (fig.10) and pp. 64, 69
Ill. checklist no. 16

17. Figure-celt pendant
Jadeite (XRD); 11.9 x 4.5 cm (4 ⅝ x 1¾ in.)
Museo Nacional de Costa Rica G-91-MS-6(4), Artefacto 102
Provenance: Monte Sele site, Guanacaste Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1991
Ill. pl. 16 (left)

18. Figure-celt pendant
Jadeite (XRD); 7.0 x 3.3 cm (2¾ x 1¼ in.)
Museo Nacional de Costa Rica G-91-MS-6(4), Artefacto 103
Provenance: Monte Sele site, Guanacaste Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1991
Ill. pl. 16 (center)

19. Half a bird-celt pendant
Jadeite (XRD); 9.2 x 2.0 cm (3⅝ x ¾ in.)
Museo Nacional de Costa Rica G-91-MS-6(4), Artefacto 101
Provenance: Monte Sele site, Guanacaste Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1991
Ill. pl. 16 (right)

20. Animal-celt pendant
Jadeite (XRD); 7.9 x 4.3 cm (3⅛ x 1⅝ in.)
Museo del Jade, INS 6725
Provenance: site unknown
Ill. pl. 43



No. 25

21. Dual-aspect pendant
Jadeite (XRD); 8.7 x 2.3 cm (3⅜ x ⅞ in.)
Museo del Jade, INS 6620
Provenance: site unknown
Ill. pl. 44

22. Figure-celt pendant
Jadeite (XRD); 11.3 x 4.0 cm (4½ x 1⅝ in.)
Museo del Jade, INS 6687
Provenance: site unknown
Ill. checklist no. 22



No. 37

23. Figure-celt pendant
Jadeite (XRD); 10.6 x 4.3 cm
(4⅛ x 1⅝ in.)
Museo del Jade, INS 6707
Provenance: site unknown
Published: Soto Méndez 1996, colorpl. (p. 95), cat. no. 51 (p. 137)
Ill. pl. 48

24. Figure-celt pendant
Jadeite (XRD); 11.2 x 4.8 cm
(4⅜ x 1⅞ in.)
Museo del Jade, INS 4416
Provenance: reportedly Bagaces vicinity, Guanacaste Province
Published: Balser 1974, cover; Graham 1992, fig. 12 (p. 193)
Ill. pl. 49

25. Bird-celt pendant
Jadeite (XRD); 16.1 x 6.7 cm (6⅜ x 2⅝ in.)
Museo del Jade, INS 6451
Provenance: site unknown
Published: Balser 1980, p. 118 and pl. 50
Ill. checklist no. 25

26. Bird-celt pendant
Quartz/green jasper (XRD); 15.1 x 5.0 cm (6 x 2 in.)
Museo del Jade, INS 2275
Provenance: site unknown
Ill. pl. 33

27. Headdressed bird-celt pendant
Jadeite (XRD); 15.5 x 1.7 cm (6⅛ x ⅝ in.)
Museo del Jade, INS 4457
Provenance: site unknown
Published: Balser 1974, pl. 22 top right (p. 48); Balser 1980, p. 119 and pl. 63 right; *Between Continents* 1981, cat. no. 28
Ill. pl. 34

28. Headdressed bird-celt pendant
Jade; 15.8 x 3.2 cm (6¼ x 1¼ in.)
Museo del Jade, INS 6703
Provenance: site unknown
Ill. pl. 35

29. Bird-celt pendant
Jadeite (XRD); 12.0 x 2.5 cm (4¾ x 1 in.)
Museo Nacional de Costa Rica 7745
Provenance: site unknown
Published: Stone and Balser 1964, pp. 26–27; *Centro America* 1992, cat. no. 265
Ill. pl. 40

30. Headdressed bird-celt pendant
Jadeite (XRD); 18.2 x 3.3 cm
(7⅛ x 1¼ in.)
Museo del Jade, INS 1711
Provenance: site unknown
Published: Balser 1980, p. 119 and pl. 64 center; *Between Continents* 1981, cat. no. 27
Ill. pl. 37

31. Headdressed figure-celt pendant
Jadeite (XRD); 15.2 x 3.4 cm (6 x 1⅜ in.)
Museo del Jade, INS 1925
Provenance: site unknown
Published: *2000 años* [1975], cat. no. 15 (n.p.); Balser 1980, p. 65; *Trésors du Nouveau Monde* 1992, cat. no. 217
Ill. pl. 32

32. Headdressed figure-celt pendant
Jadeite (XRD); 15.5 x 3.3 cm
(6⅛ x 1¼ in.)
Museo del Jade, INS 6696
Provenance: site unknown
Published: Soto Méndez 1996, colorpl. (p. 96), cat. no. 52 (p. 137)
Ill. pl. 36

33. Profile bird pendant
Jadeite (XRD); 6.6 x 16.5 cm
(2⅝ x 6½ in.)
The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979, 1979.206.1137
Provenance: site unknown, reportedly Guanacaste Province
Ex coll.: Nelson A. Rockefeller, New York
Ill. checklist no. 33



No. 38

34. Profile bird pendant
Jadeite (XRD); 4.1 x 2.2 cm (1⅝ x ⅞ in.)
The Metropolitan Museum of Art, Rogers Fund, 1993, 1993.302
Provenance: site unknown, reportedly Guanacaste Province
Ill. pl. 62

35. Profile bird pendant
Jadeite (XRD); 5.7 x 5.7 cm (2 ¼ x 2 ¼ in.)
Metropolitan Museum of Art, Purchase, Judith S. Randal Foundation Gift, 1993, 1993.317
Provenance: site unknown, reportedly Guanacaste Province
Ill. pl. 42

36. Profile bird-head figure pendant
Jadeite (XRD); 11.9 x 2.2 cm (4⅝ x ⅞ in.)
Museo del Jade, INS 6659
Provenance: site unknown
Ill. pl. 41

37. Profile bird-head figure pendant
Jadeite (XRD); 6.7 x 2.1 cm (2⅝ x ⅞ in.)
Carnegie Museum of Natural History 2939/579
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Published: Hartman 1907, pl. 37 (fig. 1) and p. 74, pl. 44 (fig. 5) and p. 88
Ill. checklist no. 37

38. Profile bird-head figure pendant
Jadeite (XRD); 7.9 x 1.8 cm (3⅛ x ¾ in.)
Colección Daniel Oduber, San José
Provenance: site unknown, possibly Guanacaste Province
Ill. checklist no. 38

39. Profile animal-head figure pendant
Jadeite (XRD); 9.7 x 3.4 cm (3⅞ x 1⅜ in.)
Museo del Jade, INS 6745
Provenance: site unknown
Ill. pl. 45



No. 40

40. Figure pendant
Jadeite (XRD); 10.0 x 4.4 cm (3⅞ x 1¾ in.)
Museo del Jade, INS 6732
Provenance: site unknown
Published: *Centro America* 1992, colorpl. (p. 269), cat. no. 275 (p. 362)
Ill. checklist no. 40

41. Pendant
Jadeite (XRD), goethite; 6.9 x 3.6 cm (2¾ x 1⅜ in.)
Museo del Jade, INS 6748
Provenance: site unknown, Nosara Valley, Nicoya Peninsula, Guanacaste Province
Published: Guerrero 1982–83, fig. 12.7A (p. 85)
Ill. pl. 78

42. Pendant
Jadeite (XRD); 7.4 x 3.8 cm (2⅞ x 1½ in.)
Museo del Jade, INS 5924
Provenance: site unknown
Published: Baudez 1970, ill. 154 center right; Ferrero 1977, pl. 4 center right (near p. 80); Balser 1980, p. 119 and pl. 73 right; *Between Continents* 1981, cat. no. 181, pl. 77
Ill. pl. 77

43. Bat-wing pendant
Jadeite (XRD); 4.1 x 9.9 cm (1⅝ x 3⅞ in.)
Museo del Jade, INS 6672
Provenance: site unknown
Published: Soto Méndez 1996, colorpl. (p. 99), cat. no. 55 (p. 137)
Not illustrated

44. Bat-wing pendant
Jade; 5.8 x 16.5 cm (2¼ x 6½ in.)
Museo del Jade, INS 6693
Provenance: site unknown
Published: *Centro America* 1992, colorpl. (p. 266 left), cat. no. 273 (p. 361)
Ill. pl. 61

45. Bat-wing pendant
Jadeite (XRD); 3.3 x 17.5 cm (1¼ x 6⅞ in.)
Museo del Jade, INS 1927
Provenance: site unknown
Published: Balser 1980, p. 75 right; *Oro de América* 1997, cat. no. 136
Not illustrated

46. Bat-wing pendant
Jadeite (XRD); 4.1 x 15.3 cm (1⅝ x 6 in.)
Carnegie Museum of Natural History 2939/1181
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Published: Hartman 1907, pl. 44 (fig. 6) and p. 88; Lothrop 1964, p. 138 left (drawing); Willey 1974, fig. 34 (p. 250, drawing); Benson 1997, fig. 39 (p. 57)
Ill. fig. 48



No. 47

47. Tubular bead
Albite (XRD); 8.4 x 1.3 cm (3¼ x ½ in.)
Carnegie Museum of Natural History 2939/1404
Provenance: Las Huacas site, Nicoya Peninsula, Guanacaste Province
Ex coll.: José María Velasco, Santa Cruz
Published: Hartman 1907, pl. 45 (fig. 25) and p. 90, pl. 42 (fig. 21), and p. 82
Ill. checklist no. 47

48. Tubular bead
Albite (XRD); 1.7 x 21.8 cm (⅝ x 8⅝ in.)
Museo del Jade, INS 4482
Provenance: reportedly Bagaces vicinity, Guanacaste Province
Published: Balser 1974, pl. 27 center (p. 60); Balser 1980, p. 120 and pl. 80 right
Ill. pl. 82

49. Pair of ear ornaments
Jadeite (XRD); each 1.9 x 2.6 cm (¾ x 1 in.)
Museo del Jade, INS 6797, 6798
Provenance: site unknown
Ill. pl. 84

50. Ornaments (modern stringing)
Quartz/green jasper (XRD); 36 cm (14⅛ in.)
Museo del Jade, INS 1317
Provenance: site unknown
Ill. checklist no. 50

51. Container
Quartz/green jasper (XRD); 2.3 x 2.4 cm (⅞ x 1 in.)
Museo Nacional de Costa Rica P-308-OR, Entierro 14, Operación 6, Artefacto 30
Provenance: Burial 14, Orocú site, Puntarenas Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1997
Ill. pl. 21

52. Container
Quartz/green jasper XRD; 1.7 x 3.4 cm (⅝ x 1⅜ in.)
Museo del Jade, INS 4486
Provenance: site unknown
Published: Balser 1974, pl. 28 top right (p. 62); Balser 1980, p. 119 and pl. 71 center bottom
Ill. checklist no. 52

53. Container
Jade; 3.4 x 3.7 cm (1⅜ x 1½ in.)
Museo del Jade, INS 5947
Provenance: site unknown
Published: Balser 1980, p. 119 and pl. 71 right; *Oro de América* 1997, cat. no. 33
Not illustrated

54. Head-form ceremonial mace head
Jadeite (XRD); 8.5 x 7.7 cm (3⅜ x 3 in.)
Colección Alfonso Jiménez-Alvarado, San José
Provenance: site unknown
Published: *Between Continents* 1981, cat. no. 44; *Trésors du Nouveau Monde* 1992, fig. 222 (p. 257)
Ill. pl. 58



No. 50

Southern Mesoamerica and Central America



55. Figure-form ceremonial mace head
Quartz and feldspar (XRD); 5.9 x 7.9 cm (2⅜ x 3⅛ in.)
Museo del Jade, INS 6913
Provenance: site unknown
Published: *Trésors du Nouveau Monde* 1992, cat. no. 223
Ill. fig. 39

56. Head-form ceremonial mace head
Jade; 9.1 x 7.2 cm (3⅝ x 2⅞ in.)
Museo del Jade, INS 6409
Provenance: site unknown
Published: *Centro America* 1992, cat. no. 276 (p. 362)
Ill. pl. 57

57. Owl head-form ceremonial mace head
Jadeite (XRD); 7.9 x 10.2 cm (3⅛ x 4 in.)
Colección Daniel Oduber, San José
Provenance: site unknown, possibly Guanacaste Province
Ill. fig. 40

58. Owl head-form ceremonial mace head
Jadeite (XRD); 4.5 x 7.2 cm (1¾ x 2⅞ in.)
Colección Alfonso Jiménez Alvarado, San José
Provenance: site unknown
Published: *Museo Nacional de Costa Rica* 1971, p. 39
Ill. pl. 56

59. Ceremonial metate
Stone; 24.4 x 52.0 (9⅝ x 20½ in.)
Museo del Jade, INS 3854
Provenance: site unknown
Published: Chaves Chaves and Fontana Coto 1993, pp. 58–59
Ill. figs. 41, 42

MESOAMERICA

60. Olmec winged-figure pendant
Jadeite (XRD); 6.3 x 4.8 cm (2½ x 1⅞ in.)
Brooklyn Museum of Art, anonymous loan
Provenance: reportedly from a cemetery on the western flank of the Guanacaste Cordillera, Guanacaste Province, 1938
Ex coll.: Jorge A. Lines, San José
Published: Lines 1942, fig. 4 (drawing); Covarrubias 1946, fig.18; Balser 1959, fig. A (p. 281); Molina de Lines and Lines 1967, fig.18 (drawing); *The Guennol Collection* 1975, p. 324, upper entry; *The Olmec World* 1995, cat. no. 68 (p. 187), with further bibliography
Ill. pl. 23

61. Olmec winged-torso pendant
Omphacite? (XRD); 4.8 x 3.8 cm (1⅞ x 1½ in.)
Brooklyn Museum of Art, anonymous loan
Provenance: reportedly Costa Rica Farm site, Guápiles vicinity, Limón Province
Published: Balser 1959, fig. B (p. 281); *The Guennol Collection* 1975, ill. p. 322, entry p. 324; *The Olmec World* 1995, cat. no. 69 (p.188), with further bibliography
Ill. pl. 24

62. Olmec hand-paw-wing pendant
Jadeite (XRD); 16.5 x 5.8 cm (6½ x 2¼ in.)
Museo del Jade, INS 6727
Provenance: site unknown, Guanacaste Province
Published: *Centro America* 1992, cat. no. 274 (p. 361); *Olmec Art of Ancient Mexico* 1996, p. 256; Soto Méndez 1996, colorpl. (p. 104), cat. no. 60 (p. 138)
Ill. pl. 22



No. 52

63. Reworked Olmec spoon-pendant
Jadeite (XRD); 10.3 x 5.0 cm (4 x 2 in.)
Museo del Jade, INS 5922
Provenance: reportedly Guácimo vicinity, Línea Vieja, Limón Province
Published: Balser 1980, p. 117 and pl. 38 top; Pohorilenko 1981, p. 314 and fig. 4; *Centro America* 1992, cat. no. 285 (p. 363)
Ill. pl. 25

64. Olmec shell-form pendant
Jadeite (XRD); 9.9 x 31.5 cm (3⅞ x 12⅜ in.)
Museo Nacional de Costa Rica 1.5 (36)
Provenance: Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Alcina Franch 1978, fig. 447; Snarskis 1979, figs. 6, 10 (pp. 93–95, 100); Guerrero 1986, fig. 2 left; Bishop, Lange, and Easby 1991, fig. 13 (p. 325); *Oro, Jade, Bosques* 1992, colorpl. (p. 37); Snarskis 1992, fig. 3 (p. 148); Guerrero 1993, fig. 14.2 (p. 193); Lange 1993, fig. 9.23 (p. 311, detail of tomb); Parsons 1993, fig.19.1 (p. 252); *Gold, Jade, Forests* 1995, ill. p. 77
Ill. pls. 17, 27 (detail)

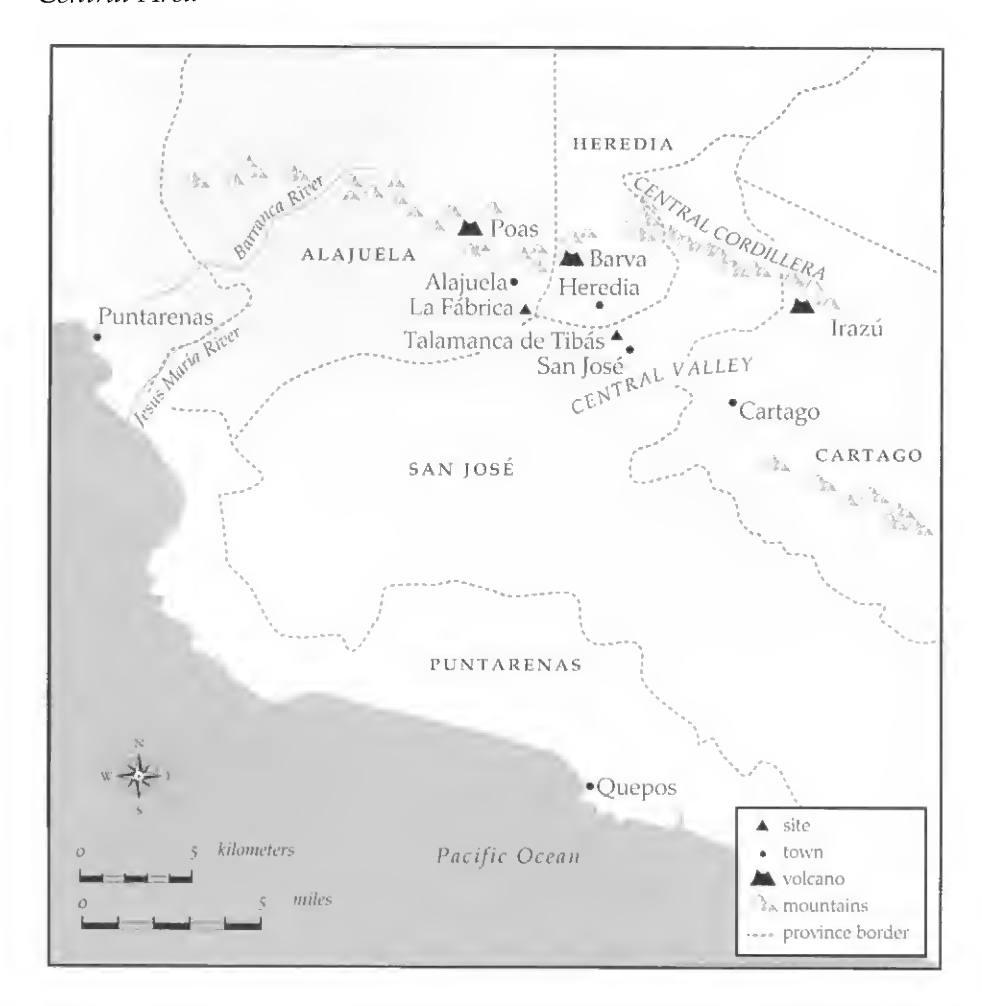
65. Olmec spoon with Maya glyphs
Jadeite (XRD); 5.2 x 18.5 cm (2 x 7¼ in.)
Museo del Jade, INS 6726
Provenance: site unknown, Guanacaste Province
Published: Fields and Reents-Budet 1992, fig. 9 (p. 86); Soto Méndez 1996, colorpl. (pp. 102 and 103), cat. nos. 58 and 59 (p. 138)
Ill. pls. 26, 28

66. Recut Maya belt celt
Jadeite (XRD); 17.4 x 3.0 cm (6⅞ x 1⅛ in.)
Museo del Jade, INS 4447
Provenance: reportedly Bagaces vicinity, Guanacaste Province
Published: Balser 1974, pl. 19 (p. 42); Ferrero 1977, ill. 1-55 (p. 87); Balser 1980, p. 117 and pl. 43 right; *Centro America* 1992, colorpl. (p. 267), cat. no. 269 (p. 361); Fields and Reents-Budet 1992, fig. 6 right (p. 85)
Ill. pl. 29

67. Recut Maya belt celt
Jade; 8.9 x 5.9 cm (3½ x 2⅜ in.)
Museo del Jade, INS 4443
Provenance: reportedly Bagaces vicinity, Guanacaste Province
Published: Stone 1972, ill. p. 149 upper left; Balser 1974, pl. 15 (p. 36); Ferrero 1977, ill. 1-54 (p. 87); Alcina 1978, fig. 451; *Centro America* 1992, cat. no. 271 (p. 361); Fields and Reents-Budet 1992, fig. 8 (p. 86)
Ill. pl. 30

68. Ornament with Maya glyph
Jadeite (XRD); 2.9 x 3.3 cm (1⅛ x 1¼ in.)
The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979, 1979.206.858
Provenance: reportedly Línea Vieja area, Limón Province
Ex coll.: Nelson A. Rockefeller, New York
Ill. pl. 31, fig. 38

Central Area



CENTRAL AREA

69. Bird-celt pendant
Jadeite (XRD); 21.0 x 5.4 cm (8¼ x 2⅛ in.)
Museo del Jade, INS 6665
Provenance: site unknown
Published: *Trésors du Nouveau Monde* 1992, fig. 214 (p. 251); Soto Méndez 1996, colorpl. (p. 112), cat. no. 68 (p. 139); *Oro de América* 1997, cat. no. 135
Not illustrated

70. Bird-celt pendant
Jadeite (XRD); 20.3 x 5.9 cm (8 x 2⅜ in.)
Museo Nacional de Costa Rica 1.5 (34)
Provenance: Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Alcina Franch 1978, fig. 456; Snarskis 1979, figs. 4, 5, 7 (pp. 93–94, 96) (view and detail of principal tomb [figs. 4, 5], view of pendant [fig. 7]); *Between Continents* 1981, cat. no. 26; Snarskis 1985, fig. 4; Guerrero 1986, fig. 2 right; Bishop, Lange, and Easby 1991, fig. 12 (p. 325); Guerrero 1993, fig. 14.2 (p. 193)
Ill. pl. 11

71. Head-form ceremonial mace head
Stone; 5.5 x 8.0 cm (2⅛ x 3⅛ in.)
Museo Nacional de Costa Rica 1.5 (37)
Provenance: Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Snarskis 1979, figs. 4–5 (pp. 93–4) (view and detail of principal tomb)
Ill. fig. 17 (left)

72. Head-form ceremonial mace head
Stone; 6.0 x 6.1 cm (2⅜ x 2⅜ in.)
Museo Nacional de Costa Rica 1.5 (4)
Provenance: Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Snarskis 1979, figs. 4, 5 (pp. 93–94) (view and detail of principal tomb)
Ill. fig. 17 (right)

73. Ceremonial metate
Stone; 24.8 x 47.5 cm (9¾ x 18¾ in.)
Museo Nacional de Costa Rica 1.5 (31)
Provenance: Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Snarskis 1979, figs. 4, 5 (pp. 93–94) (view and detail of principal tomb)
Ill. fig. 15 (top)

74. Ceremonial metate
Stone; 29.3 x 49.5 cm (11½ x 19½ in.)
Museo Nacional de Costa Rica 1.5 (32)
Provenance: Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Snarskis 1979, figs. 4, 5 (pp. 93–94) (view and detail of principal tomb)
Ill. fig. 15 (center)

75. Ceremonial metate
Stone; 27.2 x 73.6 cm (10¾ x 29 in.)
Museo Nacional de Costa Rica 1.5 (35)
Provenance: Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Snarskis 1979, figs. 4, 5 (pp. 93–94) (view and detail of principal tomb)
Ill. fig. 15 (bottom)

76. Vessel
Ceramic; 17.0 x 15.0 cm (6¾ x 5⅞ in.)
Museo Nacional de Costa Rica 1.5 TM-Tb/26855
Provenance: Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Snarskis 1979, figs. 4, 5 (pp. 93–94) (view and detail of principal tomb)
Ill. fig. 18

77. Monkey vessel
Ceramic; 20.0 x 16.0 cm (7⅞ x 6¼ in.)
Museo Nacional de Costa Rica 1.5 (26)
Provenance: Tomb C, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Published: Snarskis 1979, fig. 8 top left (p. 97); *Between Continents* 1981, cat. no. 6, pl. 4; *Oro, Jade, Bosques* 1992, colorpl. (p. 102), cat. no. 73 (p. 148); *Gold, Jade, Forests* 1995, cat. no. 73 (p. 95) and fig. 73 (p. 79); Day and Tillett 1996, fig. 10.5 (p. 227)
Ill. pl. 18



No. 91

78. Bead
Quartz/green jasper (XRD); 1.6 x 3.3 cm (⅝ x 1¼ in.)
Museo Nacional de Costa Rica 1.5 (7)
Provenance: Tomb C, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Ill. pl. 19

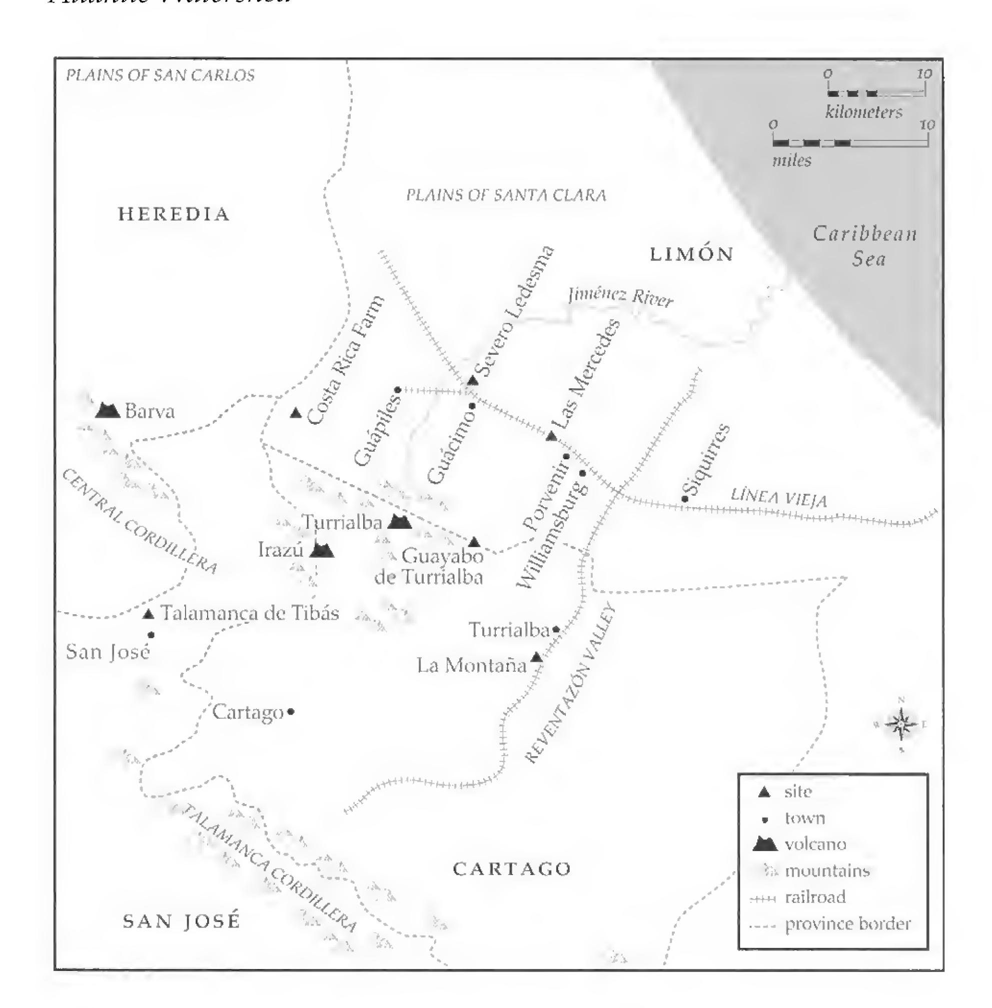
79. Three tubular beads
Jade; (B) 1.1 x 5.5 cm (⅜ x 2⅛ in.); (C) 1.6 x 7.7 cm (5/8 x 3 in.); (D) 1.4 x 5.2 cm (1/2 x 2 in.)
Museo Nacional de Costa Rica A-10-LF Tumba 1, Artefacto B, C, D
Provenance: Tomb 1 (A-10-LF), La Fábrica site, Alajuela Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1978–80
Ill. pl. 20

80. Necklace
Jade; 48.2 x 16.5 cm (19 x 6½ in.)
Museo Nacional de Costa Rica 1.5 (40)
Provenance: Adjacent to Principal Tomb, Talamanca de Tibás site, San José Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1977
Ill. pl. 81

81. Figure-celt pendant
Jadeite (XRD); 11.7 x 3.9 cm (4⅝ x 1½ in.)
Museo del Jade, INS 6708
Provenance: site unknown, possibly Central Area
Ill. pl. 9

82. Figure-celt pendant
Jadeite (XRD); 9.6 x 3.8 cm (3¾ x 1½ in.)
Museo del Jade, INS 6643
Provenance: site unknown
Published: Soto Méndez 1996, colorpl. (p. 108), cat. no. 64 (p. 139)
Ill. pl. 50

Atlantic Watershed



83. Figure-celt pendant
Jadeite (XRD); 10.0 x 4.0 cm
(3⅞ x 1⅝ in.)
Museo del Jade, INS 6638
Provenance: site unknown
Published: Soto Méndez 1996, colorpl. (p.108), cat. no. 64 (p. 139)
Ill. pl. 51

84. Figure pendant
Jadeite (XRD); 11.3 x 3.3 cm
(4½ x 1¼ in.)
Museo del Jade, INS 6670
Provenance: site unknown
Published: *Trésors du Nouveau Monde* 1992, fig. 215 (p. 252); Soto Méndez 1996, colorpl. (p.109), cat. no. 65 (p. 139)
Ill. pl. 52

ATLANTIC WATERSHED

85. Double-end animal pendant
Jadeite (XRD); 2.8 x 4.9 cm (1⅛ x 1⅞ in.)
Museo del Jade, INS 6621
Provenance: site unknown
Ill. pl. 59

86. Staff-figure pendant
Jadeite (XRD); 13.1 x 4.1 cm
(5⅛ x 1⅝ in.)
Museo del Jade, INS 4504
Provenance: reportedly Vereh site, Talamanca region, Limón Province
Published: Balser 1974, pl. 34 (p. 73); Balser 1980, p. 121 and pl. 91
Ill. pl. 68

87. Stacked-figures pendant
Jadeite (XRD); 21.5 x 4.5 cm
(8½ x 1¾ in.)
Colección Daniel Oduber, San José
Provenance: site unknown
Ill. pls. 71, 72

88. Linked ornament
Jadeite (XRD); 13.0 x 2.9 cm
(5⅛ x 1⅛ in.)
Colección Daniel Oduber, San José
Provenance: site unknown
Ill. pl. 80



No. 106

89. Masked-figure pendant
Jadeite (XRD); 6.5 x 2.5 cm (2½ x 1 in.)
Museo del Jade, INS 1922
Provenance: site unknown
Published: Balser 1980, p. 121 and pl. 89 left; *Between Continents* 1981, cat. no. 157, pl. 78 left; Soto Méndez 1996, colorpl. (p. 118 right), cat. no. 74 (p. 140)
Ill. pl. 69 (right)

90. Masked-figure pendant
Jadeite (XRD); 6.7 x 2.9 cm (2⅝ x 1⅛ in.)
Museo del Jade, INS 1923
Provenance: site unknown
Published: Balser 1980, p. 121 and pl. 89 right; *Between Continents* 1981, cat. no. 157, pl. 78 right; Soto Méndez 1996, colorpl. (p. 118 left), cat. no. 74 (p. 140)
Ill. pl. 69 (left)

91. Figure pendant
Jadeite (XRD); 4.8 x 2.2 cm (1⅞ x ⅞ in.)
Museo del Jade, INS 2043
Provenance: site unknown
Published: Balser 1980, p. 123 and pl. 107, lower left
Ill. checklist no. 91

92. Double-monkey pendant
Jadeite (XRD); 3.0 x 7.3 cm (1⅛ x 2⅞ in.)
Museo del Jade, INS 2070
Provenance: site unknown
Published: *2000 años* [1975], cat. no. 38 (n.p.); Balser 1980, p. 121 and pl. 90 right; *Between Continents* 1981, cat. no. 179
Ill. pl. 75

93. Masked-figure pendant
Jadeite (XRD); 11.4 x 3.8 cm (4½ x 1½ in.)
The Metropolitan Museum of Art, Purchase, Arthur M. Bullowa Bequest, 1994, 1994.429
Provenance: site unknown
Ill. pl. 73

94. Profile masked-figure pendant
Jadeite (XRD); 8.5 x 4.3 cm (3⅜ x 1⅝ in.)
Museo del Jade, INS 1785
Provenance: site unknown
Ill. pl. 74

95. Pendant
Albite (XRD); 14.0 x 5.6 cm (5½ x 2¼ in.)
Museo del Jade, INS 1539
Provenance: site unknown
Ill. pl. 88

96. Bird-celt pendant
Jadeite (XRD); 10.3 x 4.0 cm (4 x 1⅝ in.)
National Geographic Society 068 016 65
Provenance: Mercocha site, Williamsburg vicinity, Limón Province; excavated by Matthew W. Stirling, Smithsonian Institution/National Geographic Society, 1964
Published: Stirling 1969, fig. 2 center and p. 240; Ferrero 1977, ill. 1-129 center (p. 139); Stirling and Stirling Pugh 1997, fig. 3 center
Ill. pl. 7

97. Bird-celt pendant
Jadeite (XRD); 16.8 x 5.1 cm (6⅝ x 2 in.)
Museo del Jade, INS 1798
Provenance: site unknown, reportedly Atlantic Watershed
Published: *2000 años* [1975], cat. no. 5 (n.p.); Snarskis et al. 1979, ill. p. 72 upper left and back cover; Balser 1980, p. 123 and pl. 104; *Between Continents* 1981, cat. no. 23, pl. 6; *Oro de América* 1997, cat. no. 126
Not illustrated

98. Bird-celt pendant
Jadeite (XRD); 14.9 x 2.9 cm (5⅞ x 1⅛ in.)
Brooklyn Museum of Art 35.559
Provenance: Las Mercedes site, Línea Vieja, Limón Province
Ex coll.: Minor Keith, Long Island
Ill. pl. 39

99. Bird-head spacer pendant
Jadeite (XRD); 9.0 x 2.9 cm (3½ x 1⅛ in.)
Museo del Jade, INS 2069
Provenance: site unknown
Published: Ferrero 1977, pl. 19b (near p. 144); *Between Continents* 1981, cat. no. 150, pl. 66
Ill. pl. 38



No. 119

100. Double bird-head spacer pendant
Jadeite (XRD); 14.1 x 5.3 cm (5½ x 2⅛ in.)
Museo del Jade, INS 6710
Provenance: reportedly Guápiles vicinity, Línea Vieja area, Limón Province
Published: *Trésors du Nouveau Monde* 1992, fig. 218 (p. 254)
Ill. pl. 87

101. Animal-celt pendant
Jadeite (XRD); 9.3 x 5.8 cm (3⅝ x 2¼ in.)
Museo del Jade, INS 5915
Provenance: reportedly Línea Vieja area, Limón Province
Published: Baudez 1970, ill. 26 bottom left; Balser 1980, p. 118 and pl. 56; *Between Continents* 1981, cat. no. 35
Ill. pl. 89

102. Figure-celt pendant
Jadeite (XRD); 7.4 x 3.1 cm (2⅞ x 1¼ in.)
Museo del Jade, INS 5919
Provenance: site unknown
Published: Balser 1980, p. 121 and pl. 87 left
Ill. pl. 53

103. Bird-beak figure pendant
Jade; 9.5 x 4.0 cm (3¾ x 1⅝ in.)
Museo del Jade, INS 5921
Provenance: reportedly Línea Vieja area, Limón Province
Published: Baudez 1970, ill. 26 top right; Balser 1980, p. 122 and pl. 95; *Between Continents* 1981, cat. no. 161
Ill. pl. 54

104. Figure pendant
Jadeite (XRD); 5.7 x 4.1 cm (2¼ x 1⅝ in.)
National Geographic Society 068 014 65
Provenance: Pit at base of Mound (*palenque*) 2, Mercocha site, Williamsburg vicinity, Limón Province; excavated by Matthew W. Stirling, Smithsonian Institution/National Geographic Society, 1964
Published: Stirling 1969, fig. 2 lower left and p. 240; Ferrero 1977, ill. 1-129 lower left (p.139); Stirling and Stirling Pugh 1997, fig. 3 lower left
Ill. pl. 14



No. 124

105. Figure pendant
Jadeite (XRD); 9.0 x 5.0 cm (3½ x 2 in.)
Museo del Jade, INS 1930
Provenance: site unknown
Published: *2000 años* [1975], cat. no. 19 (n.p.); Snarskis et al. 1979, ill. p. 72 center right; Balser 1980, p. 121 and pl. 86 left; *Between Continents* 1981, cat. no. 178; Soto Méndez 1996, colorpl. (p. 119), cat. no. 75 (p. 140)
Ill. pl. 55

106. Figure pendant
Quartz/green jasper (XRD); 6.4 x 4.8 cm (2½ x 1⅞ in.)
Brooklyn Museum of Art 35.548
Provenance: Las Mercedes site, Línea Vieja, Limón Province
Ex coll.: Minor Keith, Long Island
Ill. checklist no. 106

107. Figure pendant
Jadeite (XRD); 8.5 x 5.3 cm (3⅜ x 2⅛ in.)
Museo del Jade, INS 1924
Provenance: site unknown
Published: Snarskis et al. 1979, ill. p. 72 top center; Balser 1980, p. 121 and pl. 85; *Between Continents* 1981, cat. no. 165, pl. 84
Ill. pl. 76

108. Double-end animal pendant
Jade; 5.3 x 14.7 cm (2⅛ x 5¾ in.)
Museo del Jade, INS 6441
Provenance: reportedly Línea Vieja area, Limón Province
Published: Balser 1980, p. 120 and pl. 77 top
Ill. pl. 60

109. Pendant
Jadeite (XRD); 12.1 x 4.8 cm (4¾ x 1⅞ in.)
Brooklyn Museum of Art 35.567a-d
Provenance: Las Mercedes site, Línea Vieja, Limón Province
Ex coll.: Minor Keith, Long Island
Ill. pl. 6

110. Pendant
Jadeite (XRD); 7.7 x 5.5 cm (3 x 2⅛ in.)
Colección Daniel Oduber, San José
Provenance: site unknown, possibly Atlantic Watershed
Ill. pl. 79

111. Profile stacked-figures pendant
Jadeite (XRD); 5.4 x 1.0 cm (2⅛ x ⅜ in.)
Museo del Jade, INS 5950
Provenance: site unknown
Ill. pl. 70

112. Profile masked-figure pendant
Jadeite (XRD); 7.7 x 4.0 cm (3 x 1⅝ in.)
Museo del Jade, INS 5951
Provenance: reportedly Línea Vieja area, Limón Province
Published: Balser 1980, p. 121 and pl. 87 right; *Between Continents* 1981, cat. no. 176, pl. 72; *Centro America* 1992, color pl. (p. 268 left), cat. no. 286 (p. 363); Soto Méndez 1996, colorpl. (p. 113), cat. no. 69 (p. 140)
Ill. pl. 67

113. Profile bird pendant
Jadeite (XRD); 4.0 x 3.5 cm (1⅝ x 1⅜ in.)
Colección Daniel Oduber, San José
Provenance: site unknown, possibly Atlantic Watershed
Ill. pl. 63

114. Profile bird pendant
Jadeite (XRD); 4.7 x 3.7 cm (1⅞ x 1½ in.)
Museo del Jade, INS 6623
Provenance: site unknown
Published: Soto Méndez 1996, colorpl. (p. 114), cat. no. 70 (p. 140)
Ill. pl. 65

115. Profile bird pendant
Jadeite (XRD); 3.8 x 3.8 cm (1½ x 1½ in.)
National Geographic Society 068 010 65
Provenance: Mercocha site (?), Williamsburg vicinity, Limón Province; excavated by Matthew W. Stirling, Smithsonian Institution/ National Geographic Society, 1964
Published: Stirling 1969, fig. 2 upper left and p. 240; Ferrero 1977, ill. l-129 upper left (p. 139); Stirling and Stirling Pugh 1997, fig. 3 upper left
Ill. pl. 64

116. Profile bird pendant
Quartz (XRD); 3.4 x 2.6 cm (1⅜ x 1 in.)
Museo Nacional de Costa Rica 7.1-Pt.1-(4)
Provenance: Severo Ledesma site, Guácimo vicinity, Limón Province; excavated by the Department of Anthropology and History, Museo Nacional de Costa Rica, 1978
Published: *Between Continents* 1981, cat. no. 156
Ill. pl. 15

117. Profile Bird pendant
Jadeite (XRD); 6.7 x 4.7 cm (2⅝ x 1⅞ in.)
The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979, 1979.206.1138
Provenance: reportedly Guácimo vicinity, Línea Vieja, Limón Province
Ex coll.: Nelson A. Rockefeller, New York
Published: Easby 1968, fig. 30 (p. 49)
Ill. pl. 66

118. Tubular bead with snake heads
Jadeite (XRD); 2.5 x 22.5 cm (1 x 8⅞ in.)
Colección Daniel Oduber, San José
Provenance: site unknown, possibly Atlantic Watershed
Ill. pl. 83

119. Snake-head bead
Jadeite (XRD); 7.6 x 1.3 cm (3 x ½ in.)
National Geographic Society 068 009 65
Provenance: Mercocha site (?), Williamsburg vicinity, Limón Province; excavated by Matthew W. Stirling, Smithsonian Institution/ National Geographic Society, 1964
Published: Stirling 1969, fig. 2 bottom and p. 240; Ferrero 1977, ill. l-129 bottom (p. 139); Stirling and Stirling Pugh 1997, fig. 3 bottom
Ill. checklist no. 119

120. Animal pendant
Jadeite (XRD); 8.7 x 2.3 cm (3⅜ x ⅞ in.)
Museo del Jade, INS 6634
Provenance: site unknown, possibly Atlantic Watershed
Not illustrated

121. Curly-tailed animal pendant
Prehnite (XRD); 2.8 x 3.8 cm (1⅛ x 1½ in.)
National Geographic Society 068 020 65
Provenance: Mercocha site (?), Williamsburg vicinity, Limón Province; excavated by Matthew W. Stirling, Smithsonian Institution/ National Geographic Society, 1964
Published: Balser 1964, p. 216, fig. 3d
Ill. pl. 85 (left)

122. Curly-tailed animal pendant
Prehnite (XRD); 2.9 x 4.0 cm (1⅛ x 1⅝ in.)
National Geographic Society 068 018 65
Provenance: Mercocha site (?), Williamsburg vicinity, Limón Province; excavated by Matthew W. Stirling, Smithsonian Institution/ National Geographic Society, 1964
Published: Balser 1964, p. 216, fig. 3c
Ill. pl. 85 (right)

123. Winged pendant
Jadeite (XRD); 2.8 x 10.7 cm (1⅛ x 4¼ in.)
Museo del Jade, INS 4898
Provenance: site unknown
Ill. pl. 86

124. Recut celt
Jade; 12.1 x 5.5 cm (4¾ x 2⅛ in.)
Museo del Jade, INS 6901
Provenance: site unknown
Ill. checklist no. 124

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